Converted Student Edition
(Printed originally in 1965)

Name _____

PRACTICE for ARITHMETIC

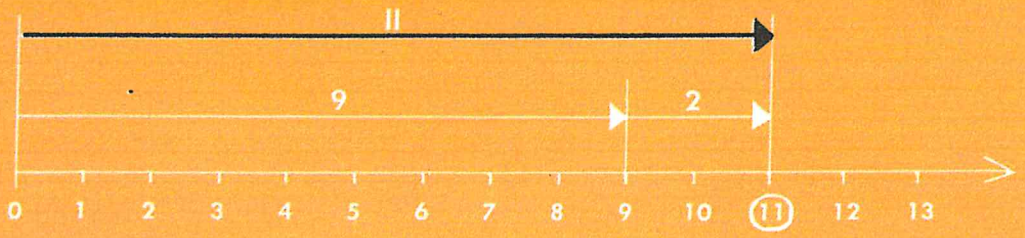
McSWAIN
BROWN
GUNDLACH
COOKE

3

$\frac{1}{2}$ = ÷ − X

XXX
X

$9 + 2 = \square$



Practice for Arithmetic 3

by

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TO THE TEACHER

Purpose This book is designed to help pupils extend their ability to think mathematically and to develop increasing proficiency in the application of mathematics.

Organization Each lesson in this practice book is designed to provide the pupil with an opportunity to re-examine and reappraise his understanding of mathematical principles he is to use. The lessons of the practice book are correlated with lessons in the text. These correlations are indicated on each page of the practice book. Except for problem solving pages and pages used for diagnostic checkup, each lesson begins with a typical example or

(*Continued on inside back cover*)

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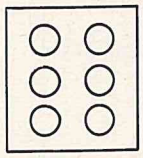
Counting Numbers

Counting numbers tell how many are in a set.

1, 2, 3, 4, 5, 6, 7, 8, 9 ——♦ Numerals name numbers.

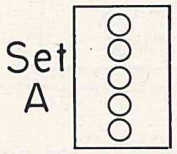
One, Two, Three, Four, Five, Six, Seven, Eight, Nine ——♦ Words name numbers.



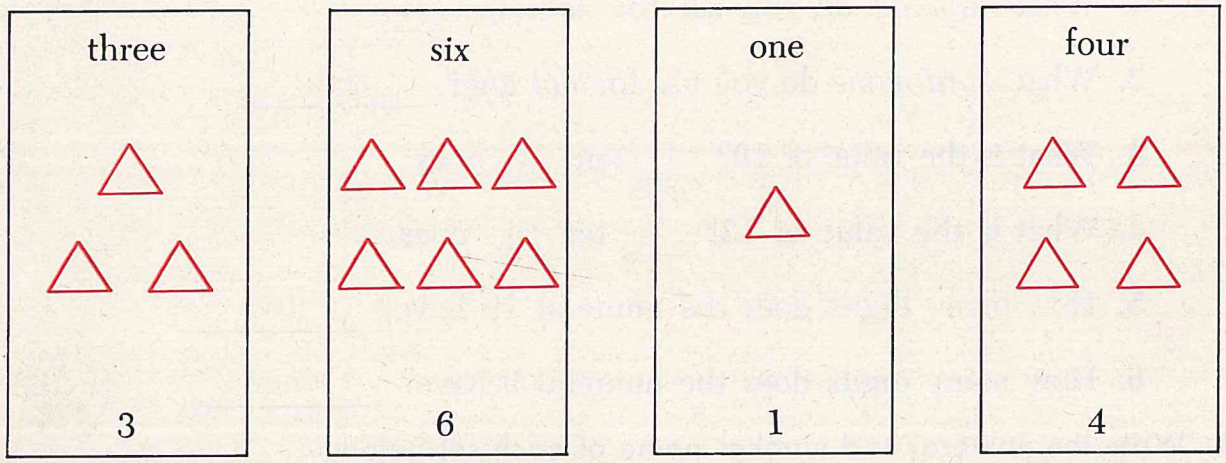
6 (or six)

A Answer the following questions.

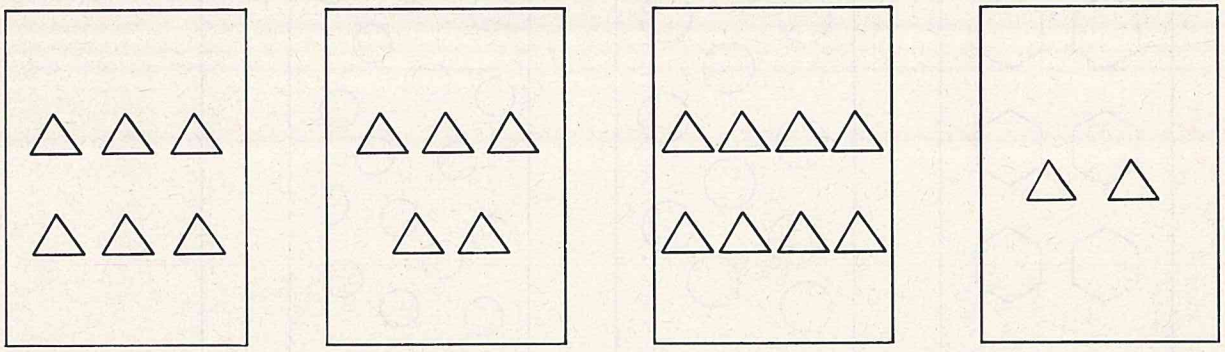
1. How many balls are in Set A? 5
2. How many balls are in Set B? 3



B Draw the correct number of △'s in each box.



C Write a numeral and a number name for the number of △'s in each set.



6 — six

5 — five

8 — eight

2 — two

NAME _____ My Score: _____ Perfect Score A-C: 11

Understanding Numbers

Set A

	tens	ones
10 =	1	0

Set B

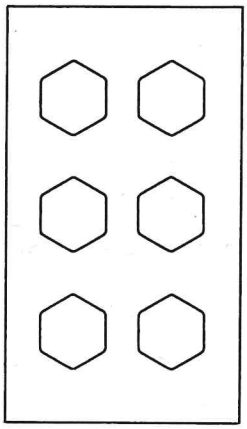
XXXXXXX
XXXXXX

- Zero is a number. Zero means *not any*.
  The numeral *0* shows the number of Set A.
- Ten ones have a value of 1 ten and no ones.
  Ten ones is written *10* and has two digits, 1 and 0. The 1 is called the tens digit, and the 0 is called the ones digit.
  The numeral 13 shows the number of Set B.

A Answer the following questions.

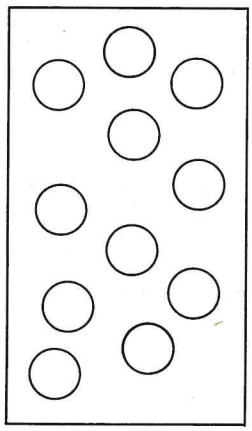
1. What *numeral* do you use for *not any*? 0
2. What *word name* do you use for *not any*? zero
3. What is the value of 10? 1 ten 0 ones
4. What is the value of 13? 1 ten 3 ones
5. How many digits does the numeral 19 have? two
6. How many digits does the numeral 9 have? one

B Write the numeral and number name of each set below.



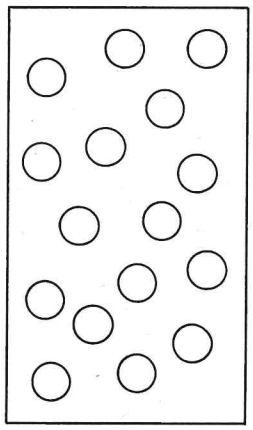
6

six



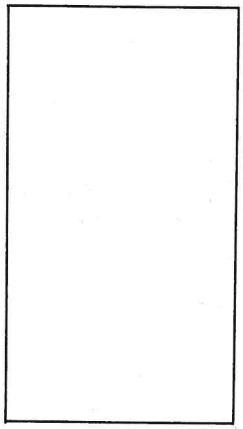
11

eleven



16

sixteen



0

zero

NAME_____ My Score:_____ Perfect Score A-B: 14

Changes in Form

- A nickel has the same value as five pennies, but the form of each is different.
- A dime has the same value as two nickels or ten pennies, but in each case the form is different.

A Write the correct numeral in each blank below.

1. How many pennies have the same value as a nickel? 5
2. How many pennies have the same value as a dime? 10
3. How many nickels have the same value as a dime? 2
4. How many dimes have the same value as 2 nickels and 10 pennies? 2

B Write the correct numeral in each blank below.

1. 10 pennies have the same value as 2 nickels or 1 dimes.
2. 5 pennies have the same value as 1 nickels.
3. 20 pennies have the same value as 4 nickels or 2 dimes.
4. 15 pennies have the same value as 3 nickels or 1 nickels and 1 dime.
5. 25 pennies have the same value as 5 nickels or 2 dimes and 1 nickel.

Can you do this? Write the correct numeral in each blank below.

1. Balloons are a nickel each. How many can Jack buy for one dime? 2
2. If lollipops are a penny each, how many can Jane buy for a dime? 10
3. How many lollipops can Jane buy for 2 nickels? 10
4. How many lollipops can Jane buy for 1 nickel? 5
5. How many lollipops can Jane buy for 1 dime and 5 pennies? 15

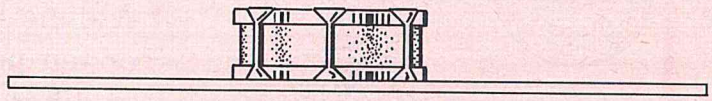
NAME_____ My Score:_____ Perfect Score A-B: 11

Use after textbook page 15.

Checkup for Chapter 1

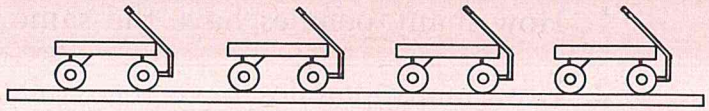
A Count the number of objects on each shelf. Write the number word on each line. Write the numeral in each box.

1. one — 1

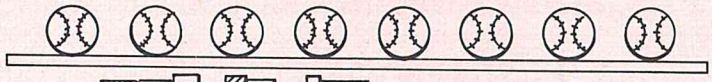


2. seven — 7

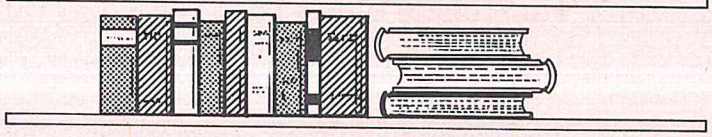
3. four — 4



4. eight — 8



5. twelve — 12



B Write the numeral for each word name.

two	2	six	6	four	4	three	3	five	5
one	1	nine	9	seven	7	eight	8	ten	10

C Name the numbers, one through ten, in natural order.

1 2 3 4 5 6 7 8 9 10

D Read the sentences below. Complete the sentence by writing the missing word. Use one of these words for each sentence:

zero numbers form one three

1. Numerals are names for numbers.
2. Zero is the name for the empty set, and it means "not any."
3. The first counting number is one.
4. A dime and two nickels have the same value but different form.
5. Thirteen means 1 ten and three ones.

NAME _____ My Score: _____ Perfect Score A-D: 35

Introduction to Addition

$3 + 5 = \square$

+ is read *plus.*

= is read *is equal to.*

□ is a placeholder and is read *how many.*

$3+5=\square$ means the same as $\begin{array}{r} 3 \\ +5 \\ \hline \end{array}$

$3+5=8$ means the same as $\begin{array}{r} 3 \\ +5 \\ \hline 8 \end{array}$

A Use one of the following to complete the sentences below.

how many　　add　　sum

1. The + sign tells you to _____add_____ the numbers.
2. 8 stands for 3 plus 5, and 8 is called the _____sum_____.
3. The □ means _____how many_____.

B Find the correct numeral for each □.

1. $3+5=\square$　　$\square = 8$
2. $5+3=\square$　　$\square = 8$
3. $3+\square=8$　　$\square = 5$
4. $\square+5=8$　　$\square = 3$
5. $\square+3=8$　　$\square = 5$

C Use a + sign, an = sign, and the numerals below to write addition statements.

	a	*b*	*c*	*d*
1.	1, 7, 8	7, 1, 8	3, 5, 8	2, 6, 8
	1+7=8	7+1=8	3+5=8	2+6=8
2.	6, 2, 8	4, 4, 8	3, 4, 7	5, 3, 8
	6+2=8	4+4=8	3+4=7	5+3=8

Can you do this? Write the correct numeral in each □ in the exercises below.

1. $\begin{array}{r} 3 \\ +\boxed{6} \\ \hline 9 \end{array}$
2. $\begin{array}{r} \boxed{3} \\ +\ 6 \\ \hline 9 \end{array}$
3. $\begin{array}{r} 3 \\ +\ 6 \\ \hline \boxed{9} \end{array}$
4. $\begin{array}{r} 7 \\ +\boxed{2} \\ \hline 9 \end{array}$
5. $\begin{array}{r} \boxed{7} \\ +\ 2 \\ \hline 9 \end{array}$
6. $\begin{array}{r} 4 \\ +\boxed{5} \\ \hline 9 \end{array}$

NAME_____　　My Score:_____　　Perfect Score A-C: 14

More Practice in Addition

$1+5=\square$ so $\square=6$
$5+1=\square$ so $\square=6$
Therefore, $1+5=5+1$.

$2+\square=5$ so $\square=3$
$\square+2=5$ so $\square=3$
Therefore, $2+3=3+2$.

It does not matter in which order the numbers are added.

A Write the correct numeral in each blank below.

1. $1+5$ is equal to $5+$ 1 .
2. $2+4$ is equal to $4+$ 2 .
3. $3+2$ is equal to $2+$ 3 .
4. $6+3$ is equal to $3+$ 6 .

B Find the sum.

	a	*b*	*c*	*d*	*e*	*f*
1.	4 + 3 = 7	3 + 4 = 7	2 + 5 = 7	5 + 2 = 7	3 + 5 = 8	5 + 3 = 8
2.	4 + 4 = 8	5 + 4 = 9	4 + 5 = 9	6 + 3 = 9	3 + 6 = 9	2 + 2 = 4

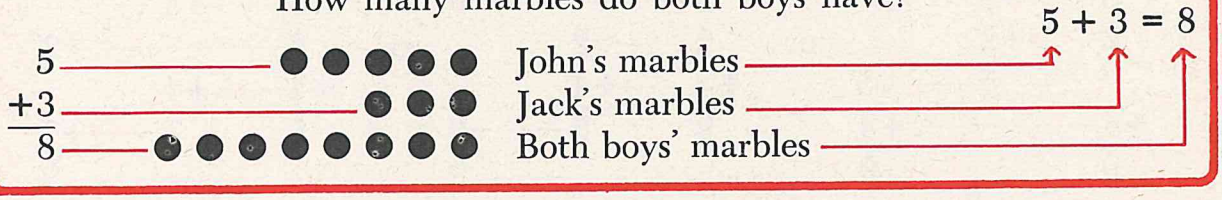
C Find the correct numeral for each $\square$.

	a	*b*	*c*	*d*	*e*
1.	$3+4=\square$ $\square=7$	$\square+1=5$ $\square=4$	$3+\square=4$ $\square=1$	$4+\square=8$ $\square=4$	$2+\square=3$ $\square=1$
2.	$\square+2=6$ $\square=4$	$1+\square=2$ $\square=1$	$6+\square=9$ $\square=3$	$5+\square=7$ $\square=2$	$7+\square=9$ $\square=2$
3.	$1+2=\square$ $\square=3$	$3+0=\square$ $\square=3$	$0+3=\square$ $\square=3$	$7+2=\square$ $\square=9$	$2+7=\square$ $\square=9$

NAME_____ My Score:_____ Perfect Score A-C: 29

Story Problems

John has 5 marbles. Jack has 3 marbles.
How many marbles do both boys have?



A Write the correct numerals in the blanks below.

1. John's marbles are shown by the numeral 5 .
2. Jack's marbles are shown by the numeral 3 .
3. The numeral 8 names the sum of 5 and 3.

B Solve each problem below. Write the arithmetic sentence and the answer for each problem. Do your work in the space at the right.

Work space

1. Jack rode his bicycle 3 blocks one day and 5 blocks another day. How many blocks did he ride altogether?

Arithmetic sentence: 3+5=□

Answer: He rode 8 blocks.

1.

2. Betty had 5 stamps. Mother gave her 4 more. How many stamps does Betty have?

Arithmetic sentence: 5+4=□

Answer: Betty has 9 stamps.

2.

3. John had 4 marbles. His father gave him 4 more. How many marbles does John have?

Arithmetic sentence: 4+4=□

Answer: John has 8 marbles.

3.

NAME_____ My Score:_____ Perfect Score A-B: 7

Adding 3 Numbers

♦ You can add only 2 numbers at a time.

$$\begin{array}{r} 3 \\ 2 \\ \hline 5 \\ +4 \\ \hline 9 \end{array} \quad \begin{array}{l} \rightarrow 3 \\ \rightarrow +2 \\ \\ \rightarrow 5 \\ \rightarrow +4 \\ \\ \rightarrow 9 \end{array} \qquad \text{or} \qquad \begin{array}{r} 3 \\ 2 \\ +4 \\ \hline 9 \end{array} \quad \begin{array}{l} \rightarrow 3 \\ \rightarrow 2 \\ \rightarrow +4 \\ \\ \rightarrow +4 \\ \\ \rightarrow +6 \\ \\ \rightarrow 9 \end{array} \qquad \text{or} \qquad \begin{array}{r} 3 \\ 2 \\ +4 \\ \hline 9 \end{array} \quad \begin{array}{l} \rightarrow 3 \\ \rightarrow 2 \\ \rightarrow +4 \\ \\ \rightarrow +7 \\ \\ \rightarrow 9 \end{array}$$

A Complete the following sentences.

1. In adding 3 numbers, first add any 2 numbers.
2. Then add this sum to the third number.

B Find each sum.

1.	2.	3.	4.	5.	6.
1	3	3	2	3	3
3	4	1	4	3	2
+4	+2	+2	+2	+0	+4
8	9	6	8	6	9

C Find the correct numeral for each □.

1. $1+2+3=\square$ $\square = 6$
2. $2+3+0=\square$ $\square = 5$
3. $5+3+1=\square$ $\square = 9$
4. $6+2+1=\square$ $\square = 9$

D Solve each problem below.

Work space

1. Ellen had 6 stamps. Mother gave her 2 stamps. Jack gave her 1 stamp. How many stamps did Ellen have?

Arithmetic sentence: $6+2+1=\square$

Answer: Ellen had 9 stamps.

1.

2. Nan sold 3 tickets for the play. Tom sold 2 tickets and Jim sold 4. How many tickets did they sell altogether?

Arithmetic sentence: $3+2+4=\square$

Answer: They sold 9 tickets.

2.

NAME_____ My Score:_____ Perfect Score A-D: 14

Checking Addition

Add	Check	Add	Check
3 2 +4 9	3 2 +4 9	3+2=5	2+3=5

A Write the correct word in each of the blanks below.

1. If we add downward in column addition, then we check the addition by adding upward.
2. In an addition statement, we check by changing the order of the addends and then adding again.

B Find each sum and check each addition.

	a	*b*	*c*	*d*	*e*	*f*
1.	3 1 +2 6	2 0 +5 7	4 2 +2 8	3 1 +4 8	0 2 +7 9	2 1 +0 3
2.	2 2 +1 5	5 0 +1 6	4 4 +0 8	1 2 +3 6	2 3 +3 8	1 1 +1 3

Can you do this? Find the correct numerals for each ●. There are several correct answers to each exercise. Some of the answers for 1 are given.

1. ● ●
+3
6

●	0	1	2	3
●	3	2	1	0
+3	+3	+3	+3	+3
6	6	6	6	6

2. ●
2
+●
5

●	3	2	1	0
2	2	2	2	2
+●	+0	+1	+2	+3
5	5	5	5	5

NAME_____ My Score:_____ Perfect Score A-B: 13

Problems About Money

Mary had 5¢. Her mother gave her 4¢ more.
How much money does Mary have now?

$5+4=\square$ $\quad\quad$ $\square=9$

$$\begin{array}{r} 5 \\ +4 \\ \hline 9 \end{array}$$

Mary now has 9¢.

A Answer the following questions.

1. Should the ¢ sign be used in an equation or a column addition? No

2. Should the ¢ sign be used in an answer? Yes

B Solve each problem below. Work space

1. Jack had 4¢ in his left pocket. He had 5¢ in his right pocket. How much money did Jack have in all? 1.

Arithmetic sentence: $4+5=\square$

Answer: Jack had 9 cents.

2. Mary had 6¢ in her bank. She put 3¢ more in her bank. How many cents did she have then? 2.

Arithmetic sentence: $6+3=\square$

Answer: Mary had 9 cents.

3. Billy spent 5¢ for candy and 3¢ for gum. How much did Billy spend altogether? 3.

Arithmetic sentence: $5+3=\square$

Answer: Billy spent 8 cents.

4. Bob had 1¢ in one pocket and 2¢ in his hand. His father gave him a nickel. How much money did he have then? 4.

Arithmetic sentence: $1+2+5=\square$

Answer: Bob had 8 cents.

NAME_____ My Score:_____ Perfect Score A-B: 10

Checkup for Chapter 2

A Write the signs that stand for each of the following.

1. plus $+$ 2. equal $=$ 3. cents $¢$ 4. placeholder $\square$

B Write the correct numeral for each $\square$.

1. $2+3=\square$ $\square=5$
2. $3+2=\square$ $\square=5$
3. $2+5=\square$ $\square=7$
4. $4+4=\square$ $\square=8$

C Find each sum.

1. $\begin{array}{r} 2 \\ 3 \\ +0 \\ \hline 5 \end{array}$
2. $\begin{array}{r} 6 \\ 1 \\ +1 \\ \hline 8 \end{array}$
3. $\begin{array}{r} 5 \\ 0 \\ +2 \\ \hline 7 \end{array}$
4. $\begin{array}{r} 1 \\ 2 \\ +1 \\ \hline 4 \end{array}$
5. $\begin{array}{r} 4 \\ 2 \\ +2 \\ \hline 8 \end{array}$
6. $\begin{array}{r} 3 \\ 0 \\ +1 \\ \hline 4 \end{array}$

D Find the correct numeral for each $\square$.

	a	*b*	*c*	*d*
1.	$2+3+\square=5$ $\square=0$	$3+1+4=\square$ $\square=8$	$2+\square+3=9$ $\square=4$	$5+1+1=\square$ $\square=7$
2.	$4+0+\square=4$ $\square=0$	$6+\square+1=9$ $\square=2$	$2+\square+1=5$ $\square=2$	$3+3+3=\square$ $\square=9$
3.	$1+2+5=\square$ $\square=8$	$8+0+0=\square$ $\square=8$	$3+\square+1=7$ $\square=3$	$1+1+1=\square$ $\square=3$

E Solve each problem below.

Work space

1. In the classroom were 2 brown tables, 1 red table, and 3 green tables. How many tables were there altogether?

Arithmetic sentence: $2+1+3=\square$

Answer: There were 6 tables.

1.

2. Jack spent $7¢$ for a pencil, $1¢$ for gum, and $1¢$ for candy. How much did he spend altogether?

Arithmetic sentence: $7+1+1=\square$

Answer: He spent $9¢$.

2.

NAME_____ My Score:_____ Perfect Score A-E: 30

Subtraction

- Numbers are subtracted where sets are taken apart or compared.
- The − sign tells you to subtract; the − sign is read *minus*.
  5−2=3 means 5 *minus* 2 *is equal to* 3.
- In 5−2=3, 3 is called the *difference*.

A Circle those words in parentheses that make the sentences true.

1. To subtract, use the (*plus,* (*minus*)) sign.
2. To add, use the ((*plus,*) *minus*) sign.
3. When sets are ((*put together,*) *taken apart*), add their numbers.
4. When sets are (*put together,* (*taken apart*)), subtract their numbers.

B Find the correct numeral for each □.

	a	*b*	*c*	*d*
1.	8−4=□	7−2=□	5−3=□	6−5=□
	□=4	□=5	□=2	□=1
2.	8−□=5	□−2=6	9−□=8	□−3=4
	□=3	□=8	□=1	□=7

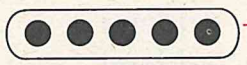
C Find each difference.

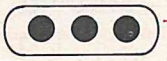
	a	*b*	*c*	*d*	*e*
1.	5 − 2 = 3	5 − 3 = 2	7 − 2 = 5	4 − 1 = 3	6 − 2 = 4
2.	9 − 5 = 4	3 − 2 = 1	6 − 0 = 6	8 − 3 = 5	5 − 1 = 4

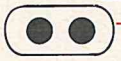
NAME_____ My Score:_____ Perfect Score A-C: 20

Story Problems Using Subtraction

- In any story problem, you must find the missing number.
- To use subtraction to find a missing number, you separate a set.

Start with a set this size:  5

Take away a set this size:  −3

Then you have a set this size:  2

A Write the answers to the following questions.

1. Can we use subtraction to solve a story problem? Yes

2. What sign stands for subtraction? minus or −

B Read each problem.

Work space

1. Mary had 3 pencils. Mary gave Sue 1 of her pencils. How many pencils did Mary have left?

Arithmetic sentence: $3-1=\square$

Answer: Mary had 2 pencils left.

1.

2. John had 5 apples. He gave 2 apples to his brother. How many apples did John have left?

Arithmetic sentence: $5-2=\square$

Answer: John had 3 apples left.

2.

Can you do this? Read the problem very carefully. Then solve the problem. Write the arithmetic sentence and then the answer.

Betty Anne had a cat; then her father brought home two more cats. The next day one cat ran away. How many cats did Betty Anne have then?

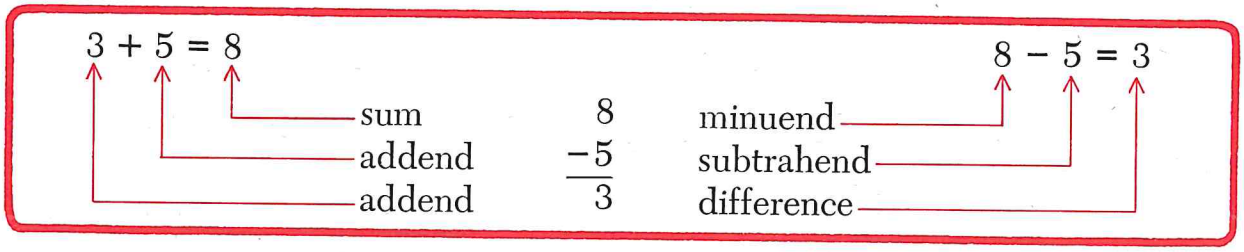
Arithmetic sentence: $1+2-1=\square$

Answer: She then had 2 cats.

NAME_____ My Score:_____ Perfect Score A-B: 6

Use after textbook page 39.

Subtraction Language



A In the equation $7-2=\square$:

1. The subtrahend is represented by 2 .
2. The difference is represented by □ .
3. The minuend is represented by 7 .

B Find the correct numeral for each □.

	a	*b*	*c*	*d*
1.	$9-\square=8$ $\square=1$	$\square-1=8$ $\square=9$	$8-5=\square$ $\square=3$	$9-\square=4$ $\square=5$
2.	$\square-4=2$ $\square=6$	$\square-2=7$ $\square=9$	$\square-5=4$ $\square=9$	$\square-6=3$ $\square=9$
3.	$9-5=\square$ $\square=4$	$9-2=\square$ $\square=7$	$9-6=\square$ $\square=3$	$4-1=\square$ $\square=3$
4.	$8-\square=4$ $\square=4$	$8-\square=6$ $\square=2$	$8-\square=2$ $\square=6$	$8-4=\square$ $\square=4$
5.	$\square-5=2$ $\square=7$	$\square-4=5$ $\square=9$	$\square-5=3$ $\square=8$	$\square-6=2$ $\square=8$

C Find each difference.

1.	2.	3.	4.	5.	6.
9 −2 7	8 −2 6	4 −1 3	5 −4 1	6 −3 3	8 −3 5

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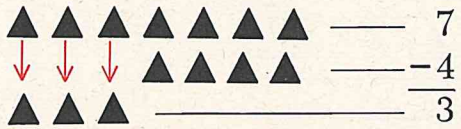
Subtraction Problems

How much greater is 7 than 4?



A Write the correct word in the blanks below.

1. To compare two numbers, subtract the smaller from the larger.

2. The amount by which one number is greater than the other is the difference.

B Solve each problem below.

Work space

1. Alice had 8 pencils and her brother had 3. How many more pencils did Alice have than did her brother?

Arithmetic sentence: $8-3=\square$

Answer: Alice had 5 more pencils.

1.

2. Sally had 9 pieces of candy. Bob had 5. How many fewer pieces of candy did Bob have than did Sally?

Arithmetic sentence: $9-5=\square$

Answer: Bob had 4 fewer pieces.

2.

3. Mary had 7 popcorn balls and Alice had 9. How many more did Alice have than did Mary?

Arithmetic sentence: $9-7=\square$

Answer: Alice had 2 more popcorn balls.

3.

4. Bill had 9 marbles. Bob had 6 marbles. How many more marbles did Bill have than did Bob?

Arithmetic sentence: $9-6=\square$

Answer: Bill had 3 more marbles.

4.

NAME_____ My Score:_____ Perfect Score A-B: 10

Zero

From this set — XXXXXXX

Remove this set — XXXXXXX

This set is empty — ( )

$\begin{array}{r} 7 \\ -7 \\ \hline 0 \end{array}$ — Identical numerals; Difference is zero.

Zero means *none* or *not any*.

A Write the answer to each question.

1. Is there any difference between 4 and 4? No
2. What symbol shows *none* or *not any*? 0

B Find each difference.

1. $\begin{array}{r} 4 \\ -4 \\ \hline 0 \end{array}$
2. $\begin{array}{r} 5 \\ -5 \\ \hline 0 \end{array}$
3. $\begin{array}{r} 1 \\ -1 \\ \hline 0 \end{array}$
4. $\begin{array}{r} 6 \\ -6 \\ \hline 0 \end{array}$
5. $\begin{array}{r} 9 \\ -9 \\ \hline 0 \end{array}$
6. $\begin{array}{r} 0 \\ -0 \\ \hline 0 \end{array}$

C Find the correct numeral for each □.

	a	*b*	*c*
1.	$4-\square=0$ $\square=4$	$\square-4=0$ $\square=4$	$4-4=\square$ $\square=0$
2.	$3-3=\square$ $\square=0$	$3-\square=3$ $\square=0$	$\square-3=0$ $\square=3$
3.	$9-\square=0$ $\square=9$	$\square-9=0$ $\square=9$	$9-9=\square$ $\square=0$

Can you do this? Solve the following problem.

John had seven marbles. On Monday he lost 3 and on Tuesday he lost 4. How many marbles did he have then?

Arithmetic sentence: $7-(3+4)=\square$

Answer: He had no marbles.

Work space

NAME _____ My Score: _____ Perfect Score A-C: 15

Checkup for Chapter 3

A Use one of the words or numerals below to complete the following sentences.

not any subtraction 6 4 2 difference

1. In <u>subtraction</u>, we find how many are left.
2. To find the <u>difference</u> between two numbers, we subtract.
3. 0 is used to mean <u>not any</u>.
4. In the problem 6−4=2, <u>6</u> is the minuend, <u>4</u> is the subtrahend, and <u>2</u> is the difference.

B Find the correct numeral for each □.

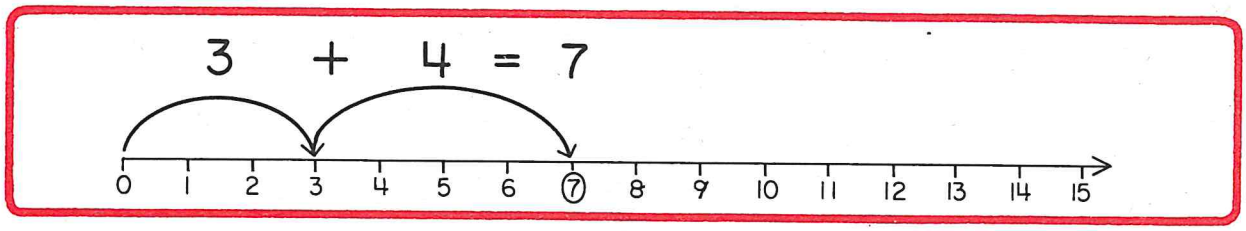
	a	*b*	*c*	*d*
1.	3+□=5	5−□=3	4+□=6	6−2=□
	□=2	□=2	□=2	□=4
2.	4+3=□	7−□=4	5+2=□	7−□=5
	□=7	□=3	□=7	□=2
3.	6+□=9	□−3=6	3+□=9	9−6=□
	□=3	□=9	□=6	□=3

C Find the sum or difference as required.

	a	*b*	*c*	*d*	*e*	*f*
1.	5 +3 = 8	4 −4 = 0	6 −3 = 3	3 +0 = 3	7 −4 = 3	2 +7 = 9
2.	6 +3 = 9	9 −6 = 3	8 −2 = 6	7 −2 = 5	5 +4 = 9	3 +4 = 7

NAME_____ My Score:_____ Perfect Score A-C: 30

The Number Line



A Write T before each true statement and F before each false statement.

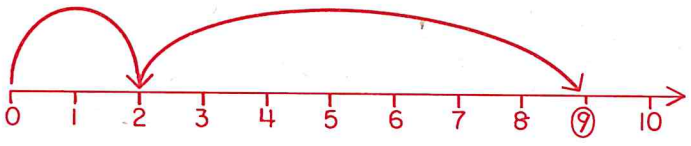
F **1.** On the number line above, the sum is 4.

T **2.** The numerals on a number line are in counting order.

B Using the number line above, find the correct numeral for each □.

	a	*b*	*c*	*d*
1.	4+□=10 □= 6	3+□=10 □= 7	4+5=□ □= 9	6+4=□ □= 10
2.	7+□=10 □= 3	5+5=□ □= 10	9+□=10 □= 1	8+□=10 □= 2
3.	3+5=□ □= 8	3+□=7 □= 4	□+3=8 □= 5	2+8=□ □= 10
4.	1+□=10 □= 9	5+□=10 □= 5	5+□=9 □= 4	□+8=10 □= 2
5.	4+6=□ □= 10	□+5=10 □= 5	□+4=10 □= 6	4+□=9 □= 5

Can you do this? Mary baked 2 cookies; Ann baked 7 cookies. How many cookies were baked in all? Draw a number line and show how you can solve this problem.



NAME_____ My Score:_____ Perfect Score A-B: 21

Sums of 10 and 11

♦ T stands for tens and O stands for ones.

T	O	
	4	4 ones
	6	6 ones
1	0	10 ones or 1 ten

T	O	
	9	9 ones
	2	2 ones
1	1	11 ones or 1 ten and 1 one

A Write the correct numeral in each blank below.

1. 5= 0 tens plus 5 ones.

2. 11= 1 tens plus 1 ones.

B Find each sum.

	a	*b*	*c*	*d*	*e*	*f*
1.	8 + 1 = 9	2 + 8 = 10	7 + 4 = 11	4 + 6 = 10	5 + 4 = 9	6 + 4 = 10
2.	2 + 9 = 11	8 + 2 = 10	3 + 8 = 11	7 + 3 = 10	5 + 6 = 11	6 + 5 = 11
3.	5 + 5 = 10	9 + 2 = 11	4 + 7 = 11	3 + 7 = 10	8 + 3 = 11	9 + 1 = 10

C Find the correct numeral for each □.

1. 9+□=11 □= 2
2. □+9=11 □= 2
3. 2+9=□ □= 11
4. 7+□=11 □= 4

Can you do this? Find the correct numeral for each □.

1. 8+4=□ □= 12
2. □+4=12 □= 8
3. 8+□=12 □= 4
4. 5+7=□ □= 12

NAME_____ My Score:_____ Perfect Score A-C: 24

Sums of 12 and 13

$$9+3=9+(1+2)=(9+1)+2=10+2=12$$
$$8+5=8+(2+3)=(8+2)+3=10+3=13$$

A Write the correct numeral in each blank below.

1. $7+5=7+($ 3 $+2)=(7+$ 3 $)+2=$ 10 $+2=$ 12

2. $9+4=9+($ 1 $+3)=(9+$ 1 $)+3=$ 10 $+3=$ 13

B Find each sum.

	a	*b*	*c*	*d*	*e*	*f*
1.	3 +9 = 12	8 +4 = 12	7 +5 = 12	6 +6 = 12	5 +7 = 12	4 +8 = 12
2.	4 +9 = 13	8 +5 = 13	7 +6 = 13	6 +7 = 13	5 +8 = 13	9 +4 = 13

C Find the correct numeral for each □.

	a	*b*	*c*	*d*
1.	$9+□=12$ $□=$ 3	$5+□=12$ $□=$ 7	$6+6=□$ $□=$ 12	$7+□=12$ $□=$ 5
2.	$4+□=13$ $□=$ 9	$8+□=13$ $□=$ 5	$□+8=13$ $□=$ 5	$5+8=□$ $□=$ 13
3.	$□+4=13$ $□=$ 9	$9+4=□$ $□=$ 13	$7+□=13$ $□=$ 6	$6+□=13$ $□=$ 7

Can you do this? Write the correct numeral in each blank below.

1. $14=$ 1 tens plus 4 ones.

2. $15=$ 1 tens plus 5 ones.

NAME_____ My Score:_____ Perfect Score A-C: 30

Use after textbook page 55.

Sums of 14, 15, 16, 17, and 18

$9+5=9+(1+4)=(9+1)+4=10+4=14$

$9+7=9+(1+6)=(9+1)+6=10+6=16$

$9+9=9+(1+8)=(9+1)+8=10+8=18$

A Write the correct numeral in each blank below.

1. 16 = 1 ten + 6 ones.
2. 14 = 1 ten + 4 ones.
3. 17 = 1 ten + 7 ones.
4. 15 = 1 ten + 5 ones.
5. 18 = 1 ten + 8 ones.
6. 1 ten + 7 ones = 17
7. 1 ten + 4 ones = 14
8. 1 ten + 5 ones = 15
9. 1 ten + 8 ones = 18
10. 1 ten + 6 ones = 16

B Find the correct numeral for each □.

	a	*b*	*c*	*d*
1.	9+□=14 □=5	□+9=18 □=9	□+8=17 □=9	8+□=16 □=8
2.	9+1=□ □=10	□+9=16 □=7	9+□=17 □=8	7+6=□ □=13
3.	□+6=13 □=7	9+5=□ □=14	7+9=□ □=16	8+□=14 □=6
4.	8+6=□ □=14	7+□=16 □=9	8+9=□ □=17	□+9=15 □=6
5.	□+7=15 □=8	7+□=15 □=8	6+7=□ □=13	□+7=14 □=7
6.	9+□=18 □=9	□+6=15 □=9	7+□=14 □=7	9+9=□ □=18

NAME _____ My Score: _____ Perfect Score A-B: 38

Using Addition and Subtraction

A Solve the following problems. Write the arithmetic sentence and the answer.

Work space

1. Eight boys played ball on the playground. Nine other boys watched the game. How many boys were on the playground altogether?

Arithmetic sentence: $8+9=\square$

Answer: Seventeen boys were on the playground.

1.

2. Joan is 9 years old. Her birthday cake had 7 candles on it. How many candles were missing from the cake?

Arithmetic sentence: $9-7=\square$

Answer: Two candles were missing.

2.

3. John read the first 8 pages of a book and then found he had 8 more pages to read to finish the book. How many pages were in the book?

Arithmetic sentence: $8+8=\square$

Answer: There were 16 pages in the book.

3.

B Find the correct numeral for each $\square$.

	a	*b*	*c*	*d*
1.	$5+\square=13$	$7+3=\square$	$7+\square=16$	$\square+9=13$
	$\square=8$	$\square=10$	$\square=9$	$\square=4$
2.	$\square+8=15$	$\square+6=15$	$6+7=\square$	$9-6=\square$
	$\square=7$	$\square=9$	$\square=13$	$\square=3$

Can you do this? Find each sum or difference.

a	*b*	*c*	*d*
$7+3+3=\square$	$9+1+8=\square$	$3+3+3+3=\square$	$17-8=\square$
$\square=13$	$\square=18$	$\square=12$	$\square=9$

NAME_____ My Score:_____ Perfect Score A-B: 11

Checkup for Chapter 4

Use after textbook page 61.

A Write the correct word in each blank below.

1. The number 10 means 1 tens and 0 ones.
2. The number 18 means 1 tens and 8 ones.
3. Does $10+6=9+7$? Yes Does $10+6=7+9$? Yes
4. Does $10+7=9+8$? Yes Does $7+10=8+9$? Yes

B Solve each problem below.

Work space

1. Alice had 8 pencils and Joe had 6. How many pencils did they have together?

   Arithmetic sentence: $8+6=\square$

   Answer: They had 14 pencils.

1.

2. Mary had 8 fish in her pool. Her father gave her 9 more fish. How many fish did Mary have then?

   Arithmetic sentence: $8+9=\square$

   Answer: Mary then had 17 fish.

2.

3. Harry had 7 marbles. Billy had 5 marbles. How many fewer marbles did Billy have than did Harry?

   Arithmetic sentence: $7-5=\square$

   Answer: Billy had 2 fewer marbles.

3.

C Find the sum or difference for each exercise below.

	a	*b*	*c*	*d*	*e*	*f*
1.	$\begin{array}{r} 9 \\ -4 \\ \hline 5 \end{array}$	$\begin{array}{r} 8 \\ +6 \\ \hline 14 \end{array}$	$\begin{array}{r} 9 \\ -8 \\ \hline 1 \end{array}$	$\begin{array}{r} 4 \\ +8 \\ \hline 12 \end{array}$	$\begin{array}{r} 9 \\ +7 \\ \hline 16 \end{array}$	$\begin{array}{r} 2 \\ +9 \\ \hline 11 \end{array}$
2.	$\begin{array}{r} 7 \\ +8 \\ \hline 15 \end{array}$	$\begin{array}{r} 4 \\ +9 \\ \hline 13 \end{array}$	$\begin{array}{r} 8 \\ -8 \\ \hline 0 \end{array}$	$\begin{array}{r} 9 \\ -2 \\ \hline 7 \end{array}$	$\begin{array}{r} 6 \\ -6 \\ \hline 0 \end{array}$	$\begin{array}{r} 7 \\ +7 \\ \hline 14 \end{array}$

NAME_____ My Score:_____ Perfect Score A-C: 26

Subtracting from 10 or 11

$10-8=2$ and $2+8=10$

Knowing addition facts helps you with subtraction.

A Write the correct numeral in each blank below.

1. Because $7+3=10$, then 10 minus 3 equals 7.
2. Because $3+7=10$, then 10 minus 7 equals 3.

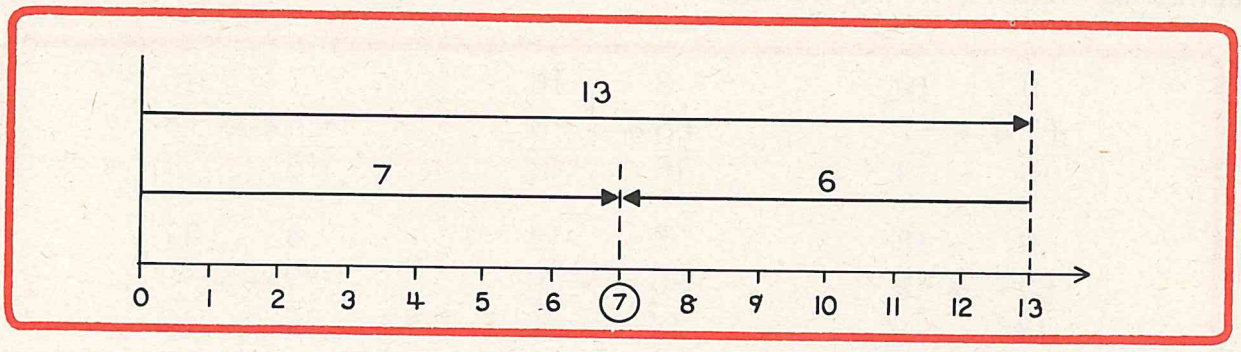
B Find the correct numeral for each □.

	a	*b*	*c*	*d*
1.	$1+\square=10$ $\square=9$	$8+\square=10$ $\square=2$	$9+1=\square$ $\square=10$	$2+\square=10$ $\square=8$
2.	$10-\square=10$ $\square=0$	$10-2=\square$ $\square=8$	$10-1=\square$ $\square=9$	$10-8=\square$ $\square=2$
3.	$7+\square=10$ $\square=3$	$4+\square=10$ $\square=6$	$3+7=\square$ $\square=10$	$\square+4=10$ $\square=6$
4.	$10-3=\square$ $\square=7$	$10-\square=6$ $\square=4$	$10-7=\square$ $\square=3$	$10-\square=7$ $\square=3$
5.	$1+\square=11$ $\square=10$	$2+\square=11$ $\square=9$	$10+1=\square$ $\square=11$	$9+2=\square$ $\square=11$
6.	$11-\square=10$ $\square=1$	$11-9=\square$ $\square=2$	$11-10=\square$ $\square=1$	$\square-9=2$ $\square=11$
7.	$3+8=\square$ $\square=11$	$3+\square=10$ $\square=7$	$7+\square=11$ $\square=4$	$\square+7=11$ $\square=4$
8.	$11-\square=3$ $\square=8$	$11-3=\square$ $\square=8$	$11-4=\square$ $\square=7$	$11-\square=4$ $\square=7$

NAME_____ My Score:_____ Perfect Score A-B: 33

Use after textbook page 66.

Subtracting from 12 or 13



A Write the correct facts or numerals in the blanks below.

1. The two additions, 6+7=13 and 7+6=13, are related to the subtraction 13−6=7.
2. The subtraction shown on the number line above shows the difference between 13 and 6.

B Find the correct numeral for each □.

	a	*b*	*c*	*d*
1.	12−3=□	9+□=12	12−□=3	12−□=8
	□= 9	□= 3	□= 9	□= 4
2.	8+5=□	5+□=13	□−8=5	13−□=8
	□= 13	□= 8	□= 13	□= 5
3.	7+□=13	6+7=□	13−6=□	□−7=6
	□= 6	□= 13	□= 7	□= 13

C Find each sum or difference.

1.	12 −3 = 9	7 −5 = 2	12 −6 = 6	5 +7 = 12
2.	12 −4 = 8	9 +3 = 12	12 −5 = 7	7 +6 = 13

NAME_____ My Score:_____ Perfect Score A-C: 22

Subtracting from 14, 15, 16, 17, and 18

$9+7=16 \leftrightarrow 16-7=9$	$8+8=16 \leftrightarrow 16-8=8$	$7+8=15 \leftrightarrow 15-8=7$
$9+9=18 \leftrightarrow 18-9=9$	$8+6=14 \leftrightarrow 14-6=8$	$8+9=17 \leftrightarrow 17-9=8$

A Answer the following questions.

1. What two subtraction facts do you know from $8+9=17$?

   $17-8=9$ and $17-9=8$

2. What two subtraction facts do you know from $8+6=14$?

   $14-8=6$ and $14-6=8$

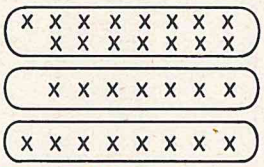
B Find the correct numeral for each □.

	a	*b*	*c*	*d*
1.	$9+5=\square$	$14-5=\square$	$\square+9=14$	$\square-9=7$
	$\square=14$	$\square=9$	$\square=5$	$\square=16$
2.	$8+6=\square$	$14-7=\square$	$\square+8=14$	$14-8=\square$
	$\square=14$	$\square=7$	$\square=6$	$\square=6$
3.	$7+\square=14$	$\square-7=7$	$6+9=\square$	$14-9=\square$
	$\square=7$	$\square=14$	$\square=15$	$\square=5$
4.	$8+7=\square$	$15-\square=7$	$7+8=\square$	$15-8=\square$
	$\square=15$	$\square=8$	$\square=15$	$\square=7$
5.	$9+\square=15$	$15-6=\square$	$7+\square=16$	$8+8=\square$
	$\square=6$	$\square=9$	$\square=9$	$\square=16$

NAME_____ My Score:_____ Perfect Score A-B: 23

Subtraction Story Problems

Al had 15 pennies. He lost 7 pennies. How many pennies did he have left?



15 — Al had this many.

−7 — He lost this many.

8 — He had this many left.

A In the sentences below, cross out the wrong words in ( ), so that the sentences are correct.

1. Add the numbers if the sets are to be (put together, ~~taken apart~~).
2. If you are to find by how many one set differs from another, (~~add,~~ subtract) their numbers.

B Solve each problem below.

Work space

1. John had 18 pieces of candy and Joan had 9. How many more pieces of candy did John have?

Arithmetic sentence: $18-9=\square$

Answer: John had 9 pieces more.

1.

2. Mary needed 16 apples for her party. She found that she only had 8. How many more did she need?

Arithmetic sentence: $16-8=\square$

Answer: She needed 8 pieces more.

2.

3. Bob spent 19¢ for a tablet of paper and 7¢ for a pencil. How much more did the paper cost than did the pencil?

Arithmetic sentence: $19-7=\square$

Answer: The paper cost 8¢ more.

3.

4. There were 11 sheets of blue paper and 8 sheets of red paper on Miss Smith's desk. How many fewer sheets of red paper than blue paper were on the desk?

Arithmetic sentence: $11-8=\square$

Answer: There were 3 fewer sheets of red paper.

4.

NAME_____ My Score:_____ Perfect Score A-B: 10

Addition and Subtraction Story Problems

Solve each problem below.

Work space

1. Bill had 17¢ and John had 6¢. How much more money did Bill have than John?

Arithmetic sentence: $17-6=\square$

Answer: Bill had 11¢ more than John.

1.

2. When Alice went to the store she had 10¢. She bought some lead for her pencil for 3¢. How much money did she have left?

Arithmetic sentence: $10-3=\square$

Answer: Alice had 7¢ left.

2.

3. Mary saw 11 birds sitting on a fence. As she watched, 3 birds flew away. How many were still on the fence?

Arithmetic sentence: $11-3=\square$

Answer: Eight birds were still on the fence.

3.

4. At the zoo, John saw 8 monkeys in one cage and 9 monkeys in another cage. How many monkeys were there in all?

Arithmetic sentence: $8+9=\square$

Answer: There were 17 monkeys in all.

4.

Can you do this? Solve the following problem. Write the arithmetic sentence and the answer.

Richard had 16 marbles. On Monday he lost 7; on Tuesday he lost 8 more. On Thursday he won 12. How many marbles did he have then?

Arithmetic sentence: $16-(7+8)+12=\square$

Answer: He had 13 marbles at the end of the week.

NAME_____ My Score:_____ Perfect Score: 8

Use after textbook page 75.

Checkup for Chapter 5

A Answer the following questions.

1. When you can solve a problem by taking a set apart, which operation would you use? subtraction
2. Which operation do you use to find how many are left? subtraction
3. Which operation do you use to find how many more are needed? subtraction
4. Which operation do you use to find how many less? subtraction
5. When you can solve a problem by joining sets, which operation would you use? addition

B Solve the following problems.

Work space

1. Mary needed 12¢. She had 5¢. How many more cents does Mary need?

Arithmetic sentence: $12-5=\square$

Answer: She needs 7¢ more.

1.

2. At Jim's party there were 15 children. Six children had to leave early. How many children were left?

Arithmetic sentence: $15-6=\square$

Answer: Nine children were left.

2.

C Find each difference.

1.	2.	3.	4.	5.
18	17	16	15	14
−9	−8	−9	−5	−7
9	9	7	10	7

NAME_____ My Score:_____ Perfect Score A-C: 14

Using Addition

24	2 tens + 4 ones	20+4
+3	+ 3 ones	+ 3
27	2 tens + 7 ones	20+7

A Write the correct numeral in each ____ below.

1. When adding 35 and 4, think of 35 as 3 tens plus 5 ones.
2. Then 35+4=□ can be written as (30+ 5)+4=□.
3. Also, 35+4=□ can be written as 30 +(5+4)=□.
4. The sum of 35 and 4 is 39 .

B Find each sum.

	a	*b*	*c*	*d*	*e*
1.	11 +2 13	21 +2 23	31 +2 33	41 +2 43	51 +2 53
2.	11 +3 14	21 +3 24	31 +3 34	41 +3 44	51 +3 54
3.	11 +4 15	21 +4 25	31 +4 35	41 +4 45	51 +4 55
4.	11 +5 16	21 +5 26	31 +5 36	41 +5 46	51 +5 56
5.	11 +6 17	21 +6 27	31 +6 37	41 +6 47	51 +6 57

NAME_____ My Score:_____ Perfect Score A-B: 29

Problem Solving

A Solve the following problems.

Work space

1. Carol had 15 cards. She got 4 more as a present. How many cards did she have then? **1.**

Arithmetic sentence: 15+4=□

Answer: She had 19 cards altogether.

2. George bought some crayons for 20¢ and a pen holder for 9¢. How much money did he spend in all? **2.**

Arithmetic sentence: 20+9=□

Answer: He spent 29¢ altogether.

3. A farmer owned 90 sheep before he bought 9 more. How many sheep did he have then? **3.**

Arithmetic sentence: 90+9=□

Answer: He had 99 sheep then.

4. Doris saw 13 birds on a telephone line. As she watched, 3 more birds flew over to the line. How many birds in all were then on the line ? **4.**

Arithmetic sentence: 13+3=□

Answer: There were 16 birds on the line.

5. Ted's mother is 35 years old. His father is 4 years older than his mother. How old is his father? **5.**

Arithmetic sentence: 35+4=□

Answer: His father is 39 years old.

B Find each sum or difference.

1.	2.	3.	4.	5.	6.
18	7	13	16	12	21
−9	+6	+4	−3	+7	+8
9	13	17	13	19	29

NAME_____ My Score:_____ Perfect Score A-B: 13

Numbers That Stand for Money

5 pennies

have the same value as

1 nickel.

2 nickels

have the same value as

1 dime.

A Write the correct word in each of the blanks below.

1. Ten pennies have the same value as 1 dime .

2. One nickel and 5 pennies have the same value as 1 dime .

B Match the coins listed in column I with those listed in column II. Write the letter of the matching coins of column I in the space provided in column II. Each letter may be used more than once.

I	II
a. 1 quarter	b 4 dimes and 10 pennies
b. 1 half dollar	a 1 dime and 15 pennies
c. 1 dime	b 2 quarters
d. 4 nickels	a 4 nickels and 5 pennies
e. 3 dimes	e 4 nickels and 10 pennies
	a 25 pennies
	d 2 dimes
	c 10 pennies

C Find each sum.

1. $\begin{array}{r} 11¢ \\ +8¢ \\ \hline 19¢ \end{array}$

2. $\begin{array}{r} 27¢ \\ +2¢ \\ \hline 29¢ \end{array}$

3. $\begin{array}{r} 62¢ \\ +4¢ \\ \hline 66¢ \end{array}$

4. $\begin{array}{r} 80¢ \\ +7¢ \\ \hline 87¢ \end{array}$

5. $\begin{array}{r} 9¢ \\ +7¢ \\ \hline 16¢ \end{array}$

6. $\begin{array}{r} 2¢ \\ +2¢ \\ \hline 4¢ \end{array}$

NAME_____ My Score:_____ Perfect Score A-C: 14

Remembering a Ten

$$\begin{array}{r} 18 \\ +6 \\ \hline \end{array}$$

- First add the ones: 8+6=14.
- Change 14 to 1 ten and 4 ones.
- Write 4 in the ones place; remember 1 ten.
- Add the tens: 1 ten + 1 ten = 2 tens. Write 2 in the tens place.

1 ten and	8 ones
+	6 ones
2 tens and	14 ones

A Write the correct word or numeral in each of the blanks below.

1. When the sum of the ones is 15, write 5 in ones place and remember 1 ten.
2. A ten remembered from the sum of the ones is added to the tens.

B Find each sum.

	a	*b*	*c*	*d*	*e*
1.	18 +6 = 24	28 +6 = 34	38 +6 = 44	48 +6 = 54	58 +6 = 64
2.	36 +7 = 43	45 +5 = 50	27 +6 = 33	58 +4 = 62	66 +8 = 74
3.	45 +7 = 52	69 +9 = 78	38 +2 = 40	69 +7 = 76	85 +8 = 93
4.	78 +6 = 84	49 +8 = 57	24 +6 = 30	83 +9 = 92	88 +6 = 94
5.	17¢ +5¢ = 22¢	47¢ +4¢ = 51¢	45¢ +9¢ = 54¢	14¢ +8¢ = 22¢	16¢ +7¢ = 23¢

NAME_____ My Score:_____ Perfect Score A-B: 27

Adding in Another Way

Start with this	$54+7=\square$
Rename 7 as $6+1$	$54+6+1=\square$
Add the combinations of 10	$60+1=\square$
Add the two addends	$61=\square$

A Answer the following questions.

1. Using a combination of 10, how would you add $25+5$? $25+5=\square$,
   $20+5+5=\square$, $20+10=\square$, $\square=30$

2. Using a combination of 10, how would you add $38+8$? $38+8=\square$,
   $38+2+6=\square$, $40+6=\square$, $\square=46$

B Find each sum.

	a	*b*	*c*	*d*	*e*	*f*
1.	6 +7 13	13 +7 20	25 +3 28	35 +7 42	6 +8 14	16 +8 24
2.	2 +9 11	12 +8 20	22 +9 31	36 +9 45	4 +6 10	14 +6 20

C Find the correct numeral for each $\square$.

1. $9+3=\square$ $\square=12$
2. $19+4=\square$ $\square=23$
3. $27+3=\square$ $\square=30$
4. $39+3=\square$ $\square=42$

Can you do this? Find all the numerals that may be used in place of *a* and *b*.

$$\begin{array}{r} 3a \\ +5 \\ \hline 3b \end{array}$$

$a=1$, $a=2$, $a=3$, $a=4$

$b=6$, $b=7$, $b=8$, $b=9$

NAME_____ My Score:_____ Perfect Score A-C: 16

Should You Add or Subtract?

Solve the following problems.

Work space

1. Mrs. Brown bought some cookies for 29¢ and some nuts for 13¢. How much money did she spend altogether?

Arithmetic sentence: $29+13=\square$

Answer: She spent 42¢ altogether.

2. Mr. Loy had 39 cows in a pasture. When he opened the pasture gate, 13 cows came out. How many cows remained?

Arithmetic sentence: $39-13=\square$

Answer: Twenty-six cows remained.

3. Joan collected 27 buttons. Then she found 6 new ones. How many buttons had she then?

Arithmetic sentence: $27+6=\square$

Answer: Joan had 33 buttons then.

4. John worked 8 pages of the workbook. The workbook has 18 pages. How many pages did he not work?

Arithmetic sentence: $18-8=\square$

Answer: He did not work 10 pages.

5. Eve brought 17 cookies to the picnic. Joan brought 7 cookies. How many cookies did the two girls bring?

Arithmetic sentence: $17+7=\square$

Answer: They brought 24 cookies.

Can you do this? Solve the following problem.

Rex bought a pen for 5¢, some paper for 20¢, and an eraser for 5¢. He gave the clerk 50¢; how much change did the clerk give Rex?

Arithmetic sentence: $50-(5+20+5)=\square$

Answer: The clerk gave him 20¢.

NAME_____ My Score:_____ Perfect Score: 10

Addition of 3 or 4 Addends

82	——	8 tens + 2 ones	2	→	2
3	——	3 ones	3	→	+3
+4	——	+ 4 ones	5	→	5
89		8 tens + 9 ones	+4	→	+4
			9		9

♦ We can add in any order, but we can only add two numbers at a time.

A Answer the following questions about the addition 82+3+4=□.

1. One way of finding the sum of the ones is 2+3=5 and 5+4=9. What is a different way of finding the sum of the ones? _____

   3+4=7 and 7+2=9 or 4+2=6 and 6+3=9

2. In adding 82+3+4, how many tens are to be added to the tens? 0

B Find each sum. Check your answers.

1.	2.	3.	4.	5.	6.
2	3	1	2	0	5
3	3	1	2	0	1
1	3	6	2	0	1
+0	+0	+1	+2	+1	+1
6	9	9	8	1	8

C Find each sum. Check your answers.

	a	*b*	*c*	*d*	*e*
1.	21	13	1	5	12
	4	3	1	3	23
	+2	+3	+47	+50	+3
	27	19	49	58	38
2.	12	5	70	22	1
	3	61	1	2	43
	+1	+2	+7	+2	+0
	16	68	78	26	44

NAME_____ My Score:_____ Perfect Score A-C: 16

Remembering a Ten in Column Addition

54	5 tens +	4 ones	50+4	
4		4 ones	4	
+6	+	6 ones	+ 6	
64	6 tens + (1)4 ones		50+14=50+10+4	
			=60+4=64	

A Write the correct numeral in each ____ below.

1. The sum of the ones is 14. Think of 14 as 1 ten and 4 ones.
2. Write 4 in the ones place and add the ten to the 5 tens.
3. The sum of 54, 4, and 6 is 64 .

B Find each sum.

	a	*b*	*c*	*d*	*e*
1.	9 2 +4 15	8 5 +3 16	5 7 +6 18	7 7 +5 19	9 5 +2 16
2.	3 45 +5 53	6 45 +2 53	9 7 +3 19	7 6 +13 26	7 7 +24 38
3.	66 1 +3 70	5 23 +5 33	27 4 +2 33	9 21 +4 34	3 14 +6 23
4.	8 6 +4 18	1 9 +5 15	69 1 +8 78	17 7 +3 27	45 3 +5 53

NAME_____ My Score:_____ Perfect Score A-B: 24

Solving Problems

Solve the following problems.

Work space

1. Mickey took 26¢ from his bank. How much did he have left after he spent 15¢?

Arithmetic sentence: 26−15=□

Answer: He had 11¢ left.

2. Tim and Dick went fishing. Tim caught 12 fish and Dick caught 17 fish. How many more fish did Dick catch than did Tim?

Arithmetic sentence: 17−12=□

Answer: Dick caught 5 fish more.

3. There were 16 boys and 11 girls in the class. How many children were in the class?

Arithmetic sentence: 16+11=□

Answer: There were 27 children in the class.

4. Jane's story is about 2 turtles, 1 dog, 4 kittens, and a bird. How many animals are in her story?

Arithmetic sentence: 2+1+4+1=□

Answer: There are 8 animals in her story.

5. Mary laid 5 books on her desk. Helen put 6 more books on Mary's desk. How many books were then on Mary's desk?

Arithmetic sentence: 5+6=□

Answer: There were 11 books on Mary's desk.

6. Joan planted 18 flower seeds. Seven of the seeds did not grow. How many grew?

Arithmetic sentence: 18−7=□

Answer: Eleven seeds grew.

NAME_____ My Score:_____ Perfect Score: 12

Use after textbook page 91.

Checkup for Chapter 6

A Find each sum.

	a	*b*	*c*	*d*	*e*
1.	28 + 7 35	72 + 9 81	3 +39 42	4 +19 23	77 + 9 86
2.	12 4 + 1 17	53 3 + 2 58	0 14 + 3 17	91 4 + 1 96	65 1 + 1 67
3.	3 3 2 +1 9	0 0 2 +2 4	1 1 1 +1 4	5 1 0 +1 7	7 1 1 +0 9

B Write the correct numeral in each of the blanks below.

1. 1 quarter = 25 pennies
2. 4 nickels = 2 dimes
3. 3 dimes = 6 nickels
4. 1 half dollar = 2 quarters

C Solve the following problems.

Work space

1. John had 14 marbles; then he found 7 more. How many marbles did he have in all?

Arithmetic sentence: 14+7=□

Answer: He had 21 marbles.

1.

2. Mary Jane had 3 chocolate cookies, 2 strawberry cookies, 1 nut cookie, and 1 caramel cookie. How many did she have in all?

Arithmetic sentence? 3+2+1+1=□

Answer: Mary Jane had 7 cookies.

2.

NAME _____ My Score: _____ Perfect Score A-C: 23

Adding Columns of Two-Digit Numbers

25	2 tens + 5 ones	20+5
31	3 tens + 1 one	30+1
+42	+4 tens + 2 ones	+40+2
98	9 tens + 8 ones	90+8

♦ Add the ones; then add the tens.

A Write T before each true statement and F before each false statement.

T **1.** *5 ones + 1 one + 2 ones* is another name for 8 ones.

T **2.** *2 tens + 3 tens + 4 tens* is another name for 9 tens.

T **3.** In column addition, the ones are added before the tens are added.

F **4.** *9 tens + 8 tens* is another name for 98.

B Find each sum.

1.
12
10
+16
38

2.
14
13
+11
38

3.
22
32
+15
69

4.
35
23
+21
79

5.
42
31
+21
94

C Solve the following problems.

Work space

1. Betty brought 12 cookies to the school party. John brought 24 cookies, and Jane brought 32 cookies. How many cookies were there in all?

Arithmetic sentence: 12+24+32=□

Answer: There were 68 cookies.

1.

2. John read 24 pages of a book on Monday, 11 pages on Tuesday, and 33 pages on Wednesday. How many pages did he read on those 3 days?

Arithmetic sentence: 24+11+33=□

Answer: He read 68 pages.

2.

NAME_____ My Score:_____ Perfect Score A-C: 12

More About Adding Two-Digit Numbers

54	5 tens + 4 ones		50+ 4
+28	+2 tens + 8 ones		+20+ 8
82	8 tens + 12 ones		70+12=82

A Write T before each true statement and F before each false statement.

T **1.** If the sum of the ones has two digits, only one of the digits is written in the ones place of the sum.

T **2.** The ten from the sum of the ones is added to the tens.

B Find each sum.

	a	*b*	*c*	*d*	*e*	*f*
1.	35 +26 61	25 +37 62	27 +46 73	44 +48 92	72 +19 91	13 +48 61
2.	76 +17 93	52 +39 91	62 +18 80	55 +29 84	48 +38 86	78 +19 97

C Solve each problem.

Work space

1. The Girl Scouts made puppets for children in hospitals. They made 18 clowns, 17 policemen, and 24 soldiers. How many puppets did the girls make?

Arithmetic sentence: 18+17+24=□

Answer: They made 59 puppets.

1.

2. Mr. Brown has 27 geese, Mr. Jones has 14 geese, and Mr. Black has 32 geese. How many geese do these farmers have in all?

Arithmetic sentence: 27+14+32=□

Answer: The farmers have 73 geese.

2.

NAME_____ My Score:_____ Perfect Score A-C: 17

Remembering Tens in Column Addition

42	4 tens +	2 ones		40+ 2
29	2 tens +	9 ones		20+ 9
+13	+1 ten +	3 ones		+10+ 3
84	8 tens +	14 ones		70+14=84

(1 ← carried to the tens column)

A Write T before each true statement and F before each false statement.

T **1.** *4 tens + 2 ones* and *40+2* are both names for 42.

T **2.** In column addition, the tens are added after the ones are added.

T **3.** *1 ten + 4 tens + 2 tens + 1 ten* is another name for 8 tens.

B Find the sums. Check your answers by adding upwards.

	a	*b*	*c*	*d*	*e*	*f*
1.	16 23 +15 54	23 14 +35 72	43 15 +22 80	16 42 +25 83	50 12 +29 91	17 34 +45 96
2.	65 17 +13 95	27 14 +32 73	18 13 +42 73	56 25 +17 98	19 22 +35 76	26 48 +16 90
3.	48 29 +13 90	38 18 +25 81	25 48 +17 90	27 15 +49 91	47 25 +19 91	54 27 +18 99
4.	26 37 +10 73	49 10 +17 76	58 25 +10 93	37 16 +10 63	20 48 +11 79	16 20 +25 61

NAME_____ My Score:_____ Perfect Score A-B: 26

Use after textbook page 102.

Problem Solving

John has 15 toys
and
Sue has 37 toys.

I How many more toys has Sue than John?
II How many fewer toys has John than Sue?
III How many toys have they altogether?

A Circle the correct word in parentheses in each statement.

1. To answer question I, use (addition, (subtraction)).
2. To answer question II, use (addition, (subtraction)).
3. To answer question III, use ((addition,) subtraction).
4. The answer to questions I and II is ((22,) 52).

B Solve the following problems.

Work space

1. All the 15 boys in the class wanted to play baseball. Only 9 were needed for the team. How many boys would not be playing?

Arithmetic sentence: $15-9=\square$

Answer: Six boys would not be playing.

1.

2. There were two children in the Brown family. Tom was 15 years old and Jane was 10 years old. How many years older was Tom than Jane?

Arithmetic sentence: $15-10=\square$

Answer: Tom was 5 years older than Jane.

2.

Can you do this? Read the problem carefully and solve it.

Donna spent 15¢ on Monday, 12¢ on Tuesday, 43¢ on Wednesday, 17¢ on Thursday, and 11¢ on Friday. How much did she spend altogether?

Arithmetic sentence: $15+12+43+17+11=\square$

Answer: She spent 98¢ in all.

NAME_____ My Score:_____ Perfect Score A-B: 8

Checkup for Chapter 7

A Solve each problem.

Work space

1. There were 18 puppies and 9 kittens in the pet shop. How many more puppies were there than kittens?

Arithmetic sentence: $18-9=\square$

Answer: There were 9 more puppies than kittens.

1.

2. Rex bought candy for 18¢, apples for 23¢, and bread for 20¢. How much money did he spend?

Arithmetic sentence: $18+23+20=\square$

Answer: He spent 61¢.

2.

3. Corrine had 17 stamps from Greece, 24 from Italy, and 21 from Jordan. How many stamps did she have altogether?

Arithmetic sentence: $17+24+21=\square$

Answer: Corrine had 62 stamps altogether.

3.

4. Doris saw 6 robins, 3 bluebirds, 1 hummingbird, and 2 sparrows. How many birds did she see?

Arithmetic sentence: $6+3+1+2=\square$

Answer: She saw 12 birds.

4.

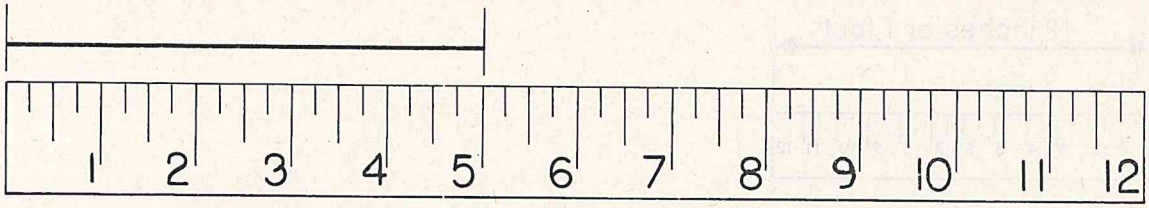
B Find the sums.

	a	*b*	*c*	*d*	*e*
1.	63 +27 90	45 +26 71	27 +18 45	39 +12 51	56 +36 92
2.	14 33 +23 70	23 24 +42 89	12 31 +26 69	23 11 +34 68	46 18 +21 85

NAME_____ My Score:_____ Perfect Score A-B: 18

Use after textbook page 108.

Using a Ruler



♦ This ruler shows that the length of the line is 5 units.

A Use a foot-ruler to measure these lengths to the nearest inch.

1. This length is 2 inches.
2. This length is 1 inch.
3. This length is about 2 inches.

B Make the following measurements to the nearest inch.

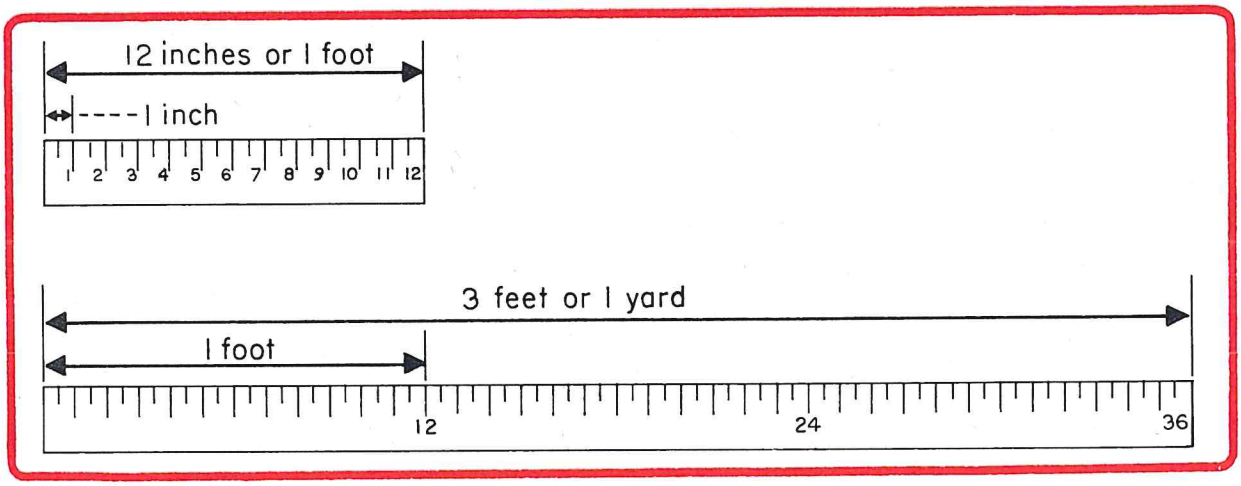
1. The length of this page (along the long edge) is about 10 inches.
2. The length of your shoe is _____.
3. The length of your arithmetic book (along the long edge) is _____.
4. The length of your ruler is _____.

C Starting at the dot under each numeral, draw lines of the lengths indicated.

1. 4 inches
2. 3 inches
3. 5 inches
4. 1 inch
5. 6 inches
6. 2 inches

NAME _____ My Score: _____ Perfect Score A-C: 11

Inches, Feet, and Yards



A Answer the following questions.

1. How many inches are equal in measure to 1 foot? 12
2. How many inches are equal in measure to 1 yard? 36
3. How many feet are equal in measure to 1 yard? 3

B Write the correct numeral in the blanks below.

1. 17 in. − 7 in. = 10 in.
2. 22 in. + 11 in. = 33 in.
3. 3 ft. + 1 ft. = 4 ft.
4. 11 in. + 18 in. + 54 in. = 83 in.
5. 18 in. + 10 in. + 8 in. = 36 in. or 1 yd.
6. 1 yd. + 1 yd. = 2 yd.
7. 36 in. − 9 in. = 27 in.
8. 13 yd. + 19 yd. = 32 yd.
9. 20 in. + 7 in. + 3 in. = 30 in.
10. 23 ft. − 6 ft. = 17 ft.

NAME_____ My Score:_____ Perfect Score A-B: 13

Measures

Liquids	Time	Weight
2 cups = 1 pint	60 minutes = 1 hour	16 ounces = 1 pound
2 pints = 1 quart	24 hours = 1 day	8 ounces = $\frac{1}{2}$ pound
4 quarts = 1 gallon	7 days = 1 week	

A Write the correct numeral in each ___.

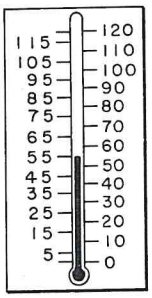
1. 2 cups = 1 pint
2. 60 minutes = 1 hour
3. 16 ounces = 1 pound
4. 2 pints = 1 quart
5. 24 hours = 1 day
6. 12 months = 1 year
7. 8 ounces = $\frac{1}{2}$ pound
8. 4 quarts = 1 gallon
9. 7 days = 1 week
10. 16 oz. + 16 oz. = 2 lb.

B Write the numeral in each ___ which makes the sentence correct.

1. 2 cups + 2 cups = 4 cups or 2 pints.
2. 1 pint + 1 pint = 1 quart.
3. 2 quarts + 2 quarts = 4 quarts or 1 gallon.
4. 30 minutes + 30 minutes = 60 minutes or 1 hour.
5. 12 hours + 12 hours = 24 hours or 1 day.
6. 8 ounces + 8 ounces = 16 ounces or 1 pound.
7. 6 cookies + 6 cookies = 12 cookies or 1 dozen cookies.
8. 24 hours + 24 hours = 2 days.
9. 4 pints + 4 pints = 1 gallon.
10. 4 ounces + 4 ounces + 8 ounces = 1 pound.
11. 3+3+3+3 = 12 or 1 dozen.

NAME_____ My Score:_____ Perfect Score A-B: 21

Measuring Temperatures



♦ A thermometer scale is a number line which is read from the bottom to the top. It measures temperature in degrees.

A Answer the following questions.

1. What temperature is shown on the thermometer above? 55°
2. If the temperature goes up 5° over that shown on the thermometer, what would the temperature be? 60°

B Solve the following problems.

Work space

1. If the temperature was 16° at 7 o'clock and 28° at noon, how many degrees had the temperature gone up?

Answer: The temperature went up 12°.

1.

2. One summer day the temperature had risen from 70° to 94°. How many degrees did it rise?

Answer: The temperature went up 24°.

2.

3. On a summer day Cleveland had a high temperature of 86° and a low temperature of 53°. What was the difference between the high temperature and the low temperature?

Answer: The difference was 33°.

3.

4. When it was 86° in Chicago, it was 116° in Phoenix, Arizona. How much warmer was it in Phoenix than it was in Chicago?

Answer: It was 30° warmer.

4.

NAME _____ My Score: _____ Perfect Score A-B: 5

Problems Using Measures

Solve the following problems.

Work space

1. Al left for school at 8:20. He got there 15 minutes later. At what time did he get to school?

Answer: He got there at 8:35.

2. Irene found the temperature to be 83° at noon and 89° at 2:00 o'clock. How much had the temperature risen in two hours?

Answer: The temperature rose 6°.

3. Bernard bought 9 ounces of candy. Helen, also, bought 9 ounces. How much candy did the two children buy?

Answer: They bought 18 ounces. (or 1 lb. 2 oz.)

4. Barbara used a quart container to fill a gallon jar with sand. How many times did she refill the quart jar and pour the sand into the gallon jar in order to fill it?

Answer: She filled the quart jar 4 times.

5. Herbert got a dozen marbles for a present. He lost 6 of the marbles. How many marbles did he have left?

Answer: He had 6 marbles left.

6. Martha has a gallon of milk. She wants to pour all the milk into cups. How many cups will she need to do this?

Answer: She needs 16 cups.

7. Ray measured the length of his desk with a yardstick. He found the length to be 2 inches shorter than the yardstick. How long was the desk?

Answer: The desk was 34 inches (or 2 ft. 10 in.) long.

8. Sonja measured the window in her bedroom and found it to be 34 inches wide. Change this to feet and inches.

Answer: The window is 2 feet 10 inches wide.

NAME_____ My Score:_____ Perfect Score: 8

Use after textbook page 123.

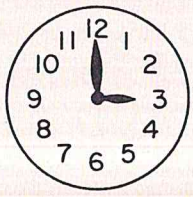
Checkup for Chapter 8

A Use one of the following words to complete the sentences below.

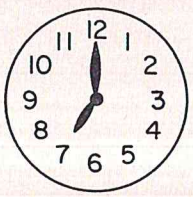
length time weight temperature

1. A clock measures time.
2. A thermometer measures temperature.
3. A foot ruler and a yardstick measure length.
4. A scale measures weight.

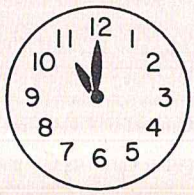
B In the blank beneath each clock face, write the time shown.

1. 

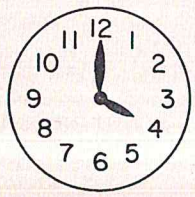
3:00 o'clock

2. 

7:00 o'clock

3. 

11:00 o'clock

4. 

4:00 o'clock

C Solve each problem.

Work space

1. Jane bought a piece of material 48 inches long. She needs 1 yard of material to make an apron. How much material will she not use?

Answer: She will not use 12 inches (or 1 foot).

1.

2. Ray had a dozen erasers; then he lost 3 of them. The next day he found 2 erasers. How many did he have then?

Answer: He had 11 erasers then.

2.

D Write the correct numeral in each ____ to make the sentence true.

1. 1 gallon = 4 quarts
2. 1 yard = 36 inches
3. 12 inches = 1 foot
4. 1 week = 7 days
5. 1 quart = 2 pints
6. 1 year = 12 months

NAME_____ My Score:_____ Perfect Score A-D: 16

Use after textbook page 126.

Subtraction Practice

39	3 tens + 9 ones	30+9
−6	− 6 ones	− 6
33	3 tens + 3 ones	30+3=33

♦ Subtract the ones; leave the tens as they are.

A Write the correct numeral in each ____.

1. 9 ones − 6 ones = 3 ones, and 3 tens − 0 tens = 3 tens.
2. 3 tens + (9 ones − 6 ones) = 3 tens + 3 ones.

B Find each difference.

	a	*b*	*c*	*d*	*e*	*f*
1.	29 − 3 = 26	45 − 3 = 42	13 − 3 = 10	68 − 1 = 67	27 − 4 = 23	69 − 4 = 65
2.	89 − 5 = 84	64 − 2 = 62	77 − 7 = 70	29 − 7 = 22	66 − 3 = 63	24 − 3 = 21

C Solve each problem.

Work space

1. Jack saved 39¢. Betty saved 7¢. How much more money has Jack saved than has Betty?

Arithmetic sentence: 39−7=□

Answer: Jack saved 32¢ more than Betty.

2. Yvonne read 9 pages of a 99-page book. How many more pages must she read to complete the book?

Arithmetic sentence: 99−9=□

Answer: Yvonne must read 90 pages more.

NAME_____ My Score:_____ Perfect Score A-C: 19

Changing the Form of a Ten in Subtraction

32	$\not{3}$ tens + $^{1}2$ ones	20+12
−5	− 5 ones	− 5
27	2 tens + 7 ones	20+ 7=27

(2+① → $\not{3}$ tens + $^{1}2$ ones)

♦ 1 ten renamed as *10 ones* is added to the ones in the minuend.

A Write the correct numeral in each ____.

1. In order to subtract 5 from 32, think of 32 as 2 tens + 12 ones.
2. Then 12 ones − 5 ones = 7 ones, and 2 tens − 0 tens = 2 tens.

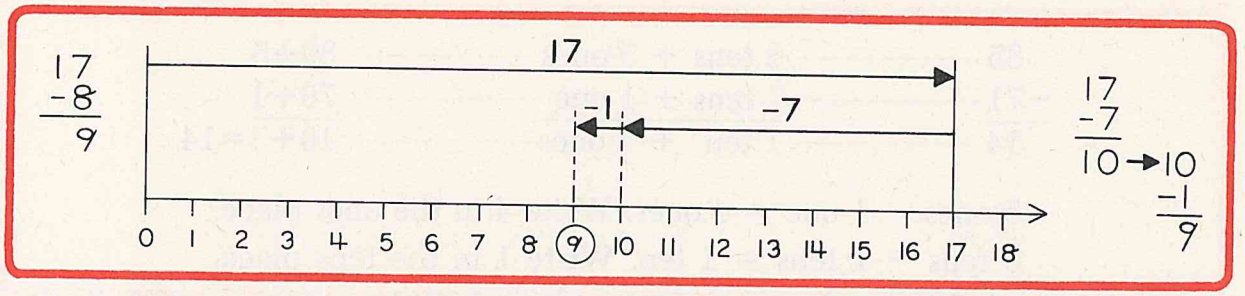
B Find each difference.

	a	*b*	*c*	*d*	*e*	*f*
1.	27 − 8 = 19	26 − 9 = 17	34 − 7 = 27	53 − 6 = 47	45 − 8 = 37	34 − 5 = 29
2.	23 − 6 = 17	62 − 9 = 53	43 − 7 = 36	35 − 6 = 29	54 − 8 = 46	43 − 5 = 38
3.	68 − 9 = 59	22 − 5 = 17	37 − 8 = 29	65 − 7 = 58	56 − 7 = 49	27 − 9 = 18
4.	37 − 9 = 28	42 − 6 = 36	73 − 9 = 64	24 − 6 = 18	72 − 5 = 67	82 − 6 = 76
5.	65 − 6 = 59	81 − 6 = 75	85 − 8 = 77	71 − 2 = 69	64 − 3 = 61	32 − 5 = 27

NAME_____ My Score:_____ Perfect Score A-B: 32

Use after textbook page 128.

Subtracting in Another Way



A Write the correct numeral in each ____.

1. Two steps are taken to subtract 8 from 17. In the first step, 7 is subtracted from 17 and the difference is 10.
2. In the second step, 1 is subtracted from 10 and the difference is 9.

B Find each difference.

	a	*b*	*c*	*d*	*e*	*f*
1.	11 − 2 = 9	12 − 3 = 9	17 − 9 = 8	13 − 5 = 8	11 − 3 = 8	26 − 8 = 18
2.	11 − 6 = 5	13 − 8 = 5	15 − 9 = 6	18 − 9 = 9	12 − 9 = 3	43 − 9 = 34
3.	23 − 7 = 16	26 − 9 = 17	36 − 8 = 28	44 − 7 = 37	71 − 7 = 64	56 − 7 = 49
4.	22 − 3 = 19	55 − 7 = 48	12 − 7 = 5	34 − 9 = 25	68 − 9 = 59	24 − 6 = 18
5.	41 − 8 = 33	24 − 9 = 15	32 − 3 = 29	14 − 8 = 6	11 − 9 = 2	23 − 8 = 15

NAME_____ My Score:____ Perfect Score A-B: 31

Subtracting Two-Digit Numbers

85	8 tens + 5 ones	80+5
−71	7 tens + 1 one	70+1
14	1 ten + 4 ones	10+4=14

5 ones − 1 one = 4 ones. Write 4 in the ones place.
8 tens − 7 tens = 1 ten. Write 1 in the tens place.

A Write the correct numeral or word in each ____.

1. The ones are subtracted before you subtract the tens .
2. The difference in the example above is 1 ten + 4 ones.

B Find each difference.

	a	*b*	*c*	*d*	*e*	*f*
1.	65	98	89	68	56	87
	−34	−63	−41	−12	−44	−67
	31	35	48	56	12	20
2.	39	74	45	59	49	39
	−19	−60	−22	−36	−21	−37
	20	14	23	23	28	2

C Solve each problem.

Work space

1. Jane sold 36 toy animals. Betty sold 12. How many more toy animals did Jane sell than did Betty?

Arithmetic sentence: 36−12=□

Answer: Jane sold 24 toy animals more.

1.

2. Jack read 45 pages of a book yesterday and 33 pages today. How many more pages did he read yesterday than he did today?

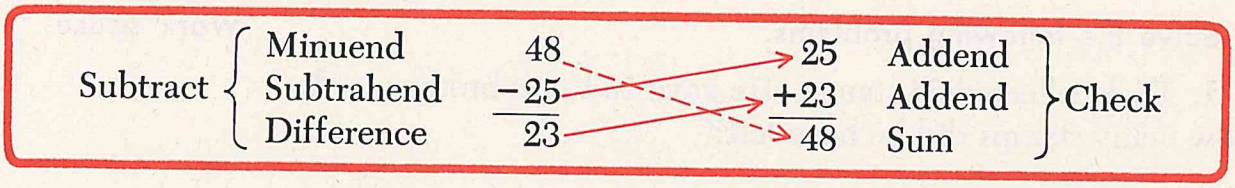
Arithmetic sentence: 45−33=□

Answer: He read 12 more pages yesterday.

2.

NAME_____ My Score:_____ Perfect Score A-C: 18

Checking Subtraction



A Write the correct word in each _____.

1. To check subtraction, you add the subtrahend to the difference.
2. The sum will equal the minuend, if the subtraction is correct.

B Find each difference. Check your answer.

	a	*b*	*c*	*d*	*e*	*f*
1.	69 −12 57 +12 69	84 −34 50	93 −63 30	48 −33 15	76 −35 41	68 −39 29
2.	52 −36 16	97 −78 19	83 −44 39	60 −12 48	81 −18 63	88 −57 31
3.	87 −41 46	49 −22 27	98 −57 41	85 −43 42	44 −22 22	78 −64 14

NAME_____ My Score:_____ Perfect Score A-B: 19

Problem Solving

Solve the following problems.

Work space

1. Dick collected 64 stamps. He gave 19 to his brother. How many stamps did he have left?

Arithmetic sentence: $64-19=\square$

Answer: He had 45 stamps left.

1.

2. There were 35 children in Miss Jones' room. There were 21 children in Miss Smith's room. How many more were in Miss Jones' room than were in Miss Smith's?

Arithmetic sentence: $35-21=\square$

Answer: There were 14 more children.

2.

3. Alice had 36 crayons. Mark had 18 crayons. How many fewer crayons did Mark have than did Alice?

Arithmetic sentence: $36-18=\square$

Answer: Mark had 18 fewer crayons.

3.

4. Bob had 48 goldfish before his birthday. As a birthday present, his father gave him 14 more. How many fish did he have then?

Arithmetic sentence: $48+14=\square$

Answer: He had 62 goldfish.

4.

Can you do this? Solve the following problem.

Susan worked as a baby sitter. She earned 30¢ on Monday, 15¢ on Tuesday, and 45¢ on Thursday. On Friday she spent 90¢. On Saturday she earned 85¢. How much money did she have at the end of the week?

Arithmetic sentence: $(30+15+45)-90+85=\square$

Answer: She had 85¢ left.

NAME_____ My Score:_____ Perfect Score: 8

Use after textbook page 138.

Addition and Subtraction Practice

A Find the sum or the difference.

	a	*b*	*c*	*d*	*e*	*f*
1.	68 −46 22	52 +34 86	96 −39 57	74 −45 29	37 +19 56	72 −29 43
2.	62 +23 85	82 −54 28	71 +13 84	43 +26 69	75 −48 27	63 +27 90
3.	45 +46 91	83 −54 29	60 +35 95	37 +29 66	40 +15 55	75 +24 99

B Solve each problem.

Work space

1. Becky is 51 inches tall and Sandy is 47 inches tall. How much taller is Becky than is Sandy?

Arithmetic sentence: $51-47=\square$

Answer: Becky is 4 inches taller.

1.

2. Mother made party hats for Ellen's birthday. She made 28 red hats, 17 blue hats, and 5 yellow hats. How many hats did she make in all?

Arithmetic sentence: $28+17+5=\square$

Answer: She made 50 hats in all.

2.

3. 24 children are coming to the party. Mother made 18 cupcakes. If each child will want one cupcake, how many more cupcakes must she bake?

Arithmetic sentence: $24-18=\square$

Answer: She needs 6 more cupcakes.

3.

NAME_____ My Score:_____ Perfect Score A-B: 23

Checkup for Chapter 9

A Write the correct word or numeral in each ____.

1. In subtracting two-digit numbers, first subtract the ones, then subtract the tens.

2. To find a difference, you use subtraction.

3. To find how many altogether, you use addition.

4. In order to subtract 19 from 37, think of 37 as 2 tens + 17 ones.

B Find each sum or difference.

	a	*b*	*c*	*d*	*e*	*f*
1.	96 −48 48	48 +33 81	96 −12 84	78 −31 47	67 +25 92	90 −25 65
2.	63 +27 90	73 −51 22	44 +44 88	73 −47 26	35 −29 6	87 −19 68

C Solve the following problems.

Work space

1. Howard went on a trip with his father. The first day they traveled 25 miles; the second day they traveled 3 miles. The third day they drove 9 miles. How far had they traveled in 3 days?

Arithmetic sentence: 25+3+9=□

Answer: They traveled 37 miles.

2. Sally read the first 29 pages of her book. The book has 54 pages. How many more pages must she read to complete the book?

Arithmetic sentence: 54−29=□

Answer: She must read 25 pages more.

NAME_____ My Score:_____ Perfect Score A-C: 20

Three-Digit Numerals

	Hundreds	Tens	Ones	
One hundred	1	0	0	1 hundred + 0 tens + 0 ones
One hundred one	1	0	1	1 hundred + 0 tens + 1 one
Two hundred ten	2	1	0	2 hundreds + 1 ten + 0 ones
Two hundred forty-six	2	4	6	2 hundreds + 4 tens + 6 ones
Nine hundred eighty-four	9	8	4	9 hundreds + 8 tens + 4 ones

A Write the correct numeral in each ____.

1. 372 is another name for 3 hundreds + 7 tens + 2 ones.
2. 888 is another name for 8 hundreds + 8 tens + 8 ones.

B Write the numerals described by the following number words.

1. Four hundred twelve 412
2. Seven hundred sixty 760
3. Two hundred twenty-two 222
4. Nine hundred one 901
5. Three hundred seventeen 317
6. Six hundred 600

C Write the number names of the following.

1. 203 Two hundred three
2. 725 Seven hundred twenty-five
3. 616 Six hundred sixteen
4. 499 Four hundred ninety-nine
5. 560 Five hundred sixty

NAME_____ My Score:_____ Perfect Score A-C: 15

Money

Coins	*Cents*	*Nickels*	*Dimes*	*Quarters*	*Half Dollars*
Nickel	5				
Dime	10	2			
Quarter	25	5			
Half Dollar	50	10	5	2	
Dollar	100	20	10	4	2

A Write the correct numeral in each ____.

1. One half dollar + 2 quarters are equal in value to one dollar.
2. Two quarters + 5 dimes are equal in value to one dollar.

B Write the correct numeral in each ____.

1. A nickel has the same value as 5 cents.
2. A dime has the same value as 10 cents.
3. A quarter has the same value as 5 nickels or 25 cents.
4. A half dollar has the same value as 50 cents or 10 nickels.

C Solve the following problems.

Work space

1. Marie bought 69¢ worth of groceries. She gave the clerk 75¢. How much change did she receive?

Arithmetic sentence: 75 − 69 = □

Answer: Marie got 6¢ change.

1.

2. Robert saw a toy boat in a store window. The price was $.95, but Robert had only 29¢. How much more money did he need to buy the boat?

Arithmetic sentence: 95 − 29 = □

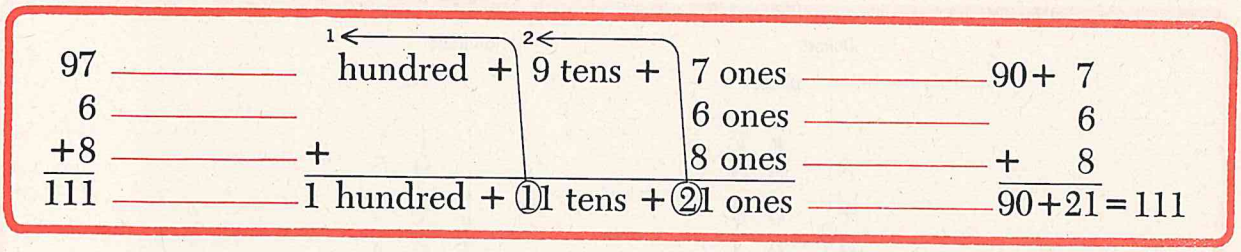
Answer: Robert needed 66¢ more.

2.

NAME_____ My Score:_____ Perfect Score A-C: 11

Use after textbook page 150.

Changing the Form of Ones and Tens



A Write the correct numeral in each ____.

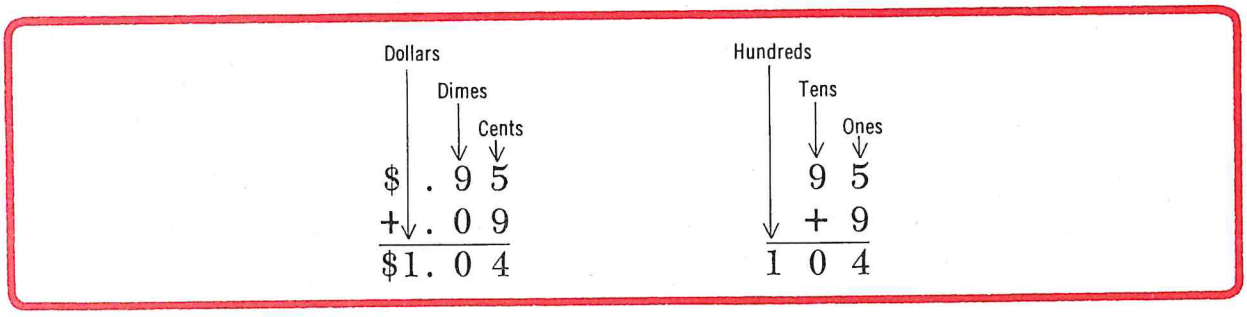
1. 7 ones + 6 ones + 8 ones = 21 ones or 2 tens + 1 ones.
2. 9 tens + 2 tens = 11 tens or 1 hundred + 1 tens.
3. 1 hundred + 0 = 1 hundreds.

B Find each sum.

	a	*b*	*c*	*d*	*e*	*f*
1.	92 +8 100	99 +2 101	91 +9 100	97 +4 101	93 +8 101	96 +7 103
2.	96 9 +6 111	88 5 +9 102	99 9 +7 115	3 4 +95 102	98 8 +8 114	9 88 +9 106
3.	82 9 +9 100	93 7 +6 106	95 6 +5 106	92 7 +6 105	86 7 +7 100	90 6 +7 103
4.	94 8 +5 107	95 7 +5 107	97 8 +9 114	89 9 +8 106	83 9 +8 100	97 8 +8 113

NAME_____ My Score:_____ Perfect Score A-B: 27

Solving Problems Using Money



A Write T before each true sentence and F before each false sentence.

T **1.** The digits of the sum of 99 and 1 or $.99 and .01 are the same.

T **2.** Hundreds are related to dollars as tens are to dimes.

T **3.** $1.94 is equal in value to 1 dollar, 9 dimes, and 4 cents.

F **4.** $3.03 is equal in value to 3 dollars, 3 dimes, and 0 cents.

B Solve each problem.

Work space

1. Mickey bought a bag of candy for 9¢ and a bag of fruit for 92¢. How much did he pay altogether?

Arithmetic sentence: 92+9=□

Answer: He paid $1.01 altogether.

1.

2. Bob put 3¢ in his bank on Monday, 6¢ on Wednesday, and 93¢ on Saturday. How much money did Bob put in his bank on those three days?

Arithmetic sentence: 3+6+93=□

Answer: He put $1.02 in his bank.

2.

C Find the sums.

1.	2.	3.	4.	5.
$ .91	$ .93	$ .99	$ .98	$ .99
+.09	+.08	+.07	+.09	+.01
$1.00	$1.01	$1.06	$1.07	$1.00

NAME _____ My Score: _____ Perfect Score A-C: 12

Adding Two-Digit Numbers

78	———	1 hundred +	7 tens +	8 ones	——— 70+ 8
+43	———	+	4 tens +	3 ones	——— +40+ 3
121	———	1 hundred +	(1)2 tens +	(1)1 ones	——— 110+11=121

A Write the correct numeral in each ____.

1. 8 ones + 3 ones = 11 ones or 1 tens and 1 ones.
2. 1 ten + 7 tens + 4 tens = 12 tens or 1 hundred and 2 tens.
3. 1 hundred + 0 = 1 hundreds.

B Find each sum.

	a	*b*	*c*	*d*	*e*
1.	74 +85 159	96 +92 188	84 +71 155	67 +82 149	23 +85 108
2.	89 +96 185	54 +98 152	96 +85 181	63 +59 122	58 +98 156
3.	63 +76 139	87 +94 181	56 +97 153	83 +98 181	79 +56 135
4.	48 +61 109	56 +81 137	80 +90 170	65 +73 138	31 +75 106
5.	84 +64 148	99 +99 198	75 +48 123	87 +63 150	25 +96 121

NAME _____ My Score: _____ Perfect Score A-B: 29

Problem Solving

Solve each problem.

Work space

1. Danny has 65 books and Timmy has 52 books. How many books do the boys have together?

Arithmetic sentence: 65+52=□

Answer: They have 117 books.

2. Mary spent 75¢ for school supplies and 35¢ for popcorn. How much did she spend in all?

Arithmetic sentence: 75+35=□

Answer: She spent $1.10.

3. Kathy spelled 88 words correctly. There were 99 words on the spelling test. How many did she miss?

Arithmetic sentence: 99−88=□

Answer: She missed 11 words.

4. Dick saved 58¢ the first week and 45¢ the second week. How much did he save in all?

Arithmetic sentence: 58+45=□

Answer: He saved $1.03.

5. Bob had 52 fish. He gave away 29 of them. How many did he have left?

Arithmetic sentence: 52−29=□

Answer: He had 23 fish left.

6. Bud bought a 49¢ beach ball and a 38¢ pail. How much money did he spend?

Arithmetic sentence: 49+38=□

Answer: He spent 87¢.

NAME_____ My Score:_____ Perfect Score: 12

Use after textbook page 156.

Column Addition with Two-Digit Numbers

$$\begin{array}{r} 46 \\ 48 \\ +35 \\ \hline 129 \end{array}$$

$$\begin{aligned} (40+6)+(40+8)+(30+5) &= (40+40+30)+(6+8+5) \\ &= \quad 110 \quad + \quad 19 \\ &= 100+10+10+9 \\ &= 100+20+9 \\ &= 129 \end{aligned}$$

A Write the correct numeral in each ____.

1. The sum of the ones is 19 ones or 1 tens and 9 ones.
2. The sum of the tens is 12 tens or 1 hundreds and 2 tens.

B Find the sums.

	a	*b*	*c*	*d*	*e*
1.	45 43 +52 140	64 88 +73 225	77 60 +58 195	44 76 +85 205	46 84 +93 223
2.	41 32 +48 121	55 42 +67 164	11 22 +29 62	42 83 +78 203	32 22 +68 122
3.	61 41 +19 121	64 50 +72 186	97 95 +83 275	42 23 +24 89	95 22 +27 144

Can you do this? Solve the following problem.

Work space

Tom's father took a long automobile trip. He traveled 300 miles a day for 4 days. How far did he travel?

Arithmetic sentence: $300+300+300+300=\square$

Answer: He traveled 1200 miles.

NAME_____ My Score:_____ Perfect Score A-B: 18

Problem Solving

A Solve the following problems.

Work space

1. Susan brought 48 cookies for the school party. Jane brought 35 cookies. How many cookies are there in all? 1.

Arithmetic sentence: 48+35=□

Answer: There are 83 cookies in all.

2. Janet had 25¢. Her mother gave her 25¢ and her father gave her 15¢. How much money does she have in all? 2.

Arithmetic sentence: 25+25+15=□

Answer: She has 65¢.

3. Peter bought a toy car for 29¢. He gave the clerk 50¢. How much change should the clerk give Peter? 3.

Arithmetic sentence: 50−29=□

Answer: He should give Peter 21¢.

4. Jane has 88¢ in her bank. Mary has 70¢ and Jack has 65¢. How much money do they have altogether? 4.

Arithmetic sentence: 88+70+65=□

Answer: They have $2.23.

5. Tim had 75¢. He lost 45¢. How much money had he then? 5.

Arithmetic sentence: 75−45=□

Answer: He had 30¢ then.

B Find the sum.

1.	2.	3.	4.	5.
89	33	86	56	75
39	14	27	64	37
+21	+55	+66	+12	+33
149	102	179	132	145

NAME_____ My Score:_____ Perfect Score A-B: 14

Checkup for Chapter 10

A Underline the words in parentheses that make each sentence correct.

1. One hundred is equal to (10 tens, 20 tens, 30 tens).
2. In a three-digit numeral, the digit farthest to the left stands for (ones, tens, hundreds).
3. A dollar is equal in value to (50 cents, 100 cents, 75 cents).
4. The sign $ stands for (dollars, cents, minus).
5. The sign ¢ stands for (dollars, cents, plus).

B Write each sum or difference.

	a	*b*	*c*	*d*	*e*	*f*
1.	99 + 44 = 143	26 − 4 = 22	98 + 7 = 105	46 − 7 = 39	90 + 40 = 130	27¢ − 5¢ = 22¢
2.	58 + 8 + 8 = 74	$.97 + .08 + .06 = $1.11	34 + 67 + 84 = 185	51 + 92 + 92 = 235	68 + 23 + 23 = 114	$.75 + .63 + .48 = $1.86

C Solve the following problems.

Work space

1. Jim bought a toy airplane for 75¢, a coloring book for 28¢, and some paint for 64¢. How much did he spend altogether?

Arithmetic sentence: 75+28+64=□

Answer: He spent $1.67.

1.

2. Sally kept a weather record. Her record showed that the temperature at noon on Saturday was 54° and at noon on Sunday it was 65°. How much warmer was it on Sunday than it was on Saturday?

Arithmetic sentence: 65−54=□

Answer: It was 11° warmer on Sunday.

2.

NAME_____ My Score:_____ Perfect Score A-C: 21

Changing the Form of Ones to Tens and of Tens to Hundreds

572	5 hundreds +	7 tens +	2 ones
+99	+	9 tens +	9 ones
671	6 hundreds +	(1)7 tens +	(1)1 ones

(1) ← 1 ten

(1) ← 1 ten

♦ 10 tens are changed to 1 hundred in the same manner that 10 ones are changed to 1 ten.

A Write the correct numeral in each ____.

1. The sum of the ones is 11 ones.
2. The sum of the tens is 17 tens.
3. 6 hundreds + 7 tens + 1 one is another name for 671.
4. 600 + 70 + 1 is also another name for 671.

B Find each sum.

	a	*b*	*c*	*d*	*e*
1.	945 +41 986	111 +11 122	242 +24 266	200 +10 210	323 +42 365
2.	171 +42 213	652 +93 745	327 +92 419	487 +52 539	251 +96 347
3.	513 +77 590	416 +65 481	372 +19 391	855 +15 870	308 +82 390
4.	828 +88 916	888 +88 976	353 +47 400	721 +79 800	827 +78 905

NAME_____ My Score:_____ Perfect Score A-B: 21

Adding Three-Digit Numbers

Use after textbook page 167.

535	5 hundreds +	3 tens +	5 ones
297	2 hundreds +	9 tens +	7 ones
+123	+1 hundred +	2 tens +	3 ones
955	9 hundreds +	15 tens +	15 ones

A Write the correct numeral in each ____.

1. The sum of the ones is 15 ones.
2. The sum of the tens is 15 tens.
3. The sum of the hundreds is 9 hundreds.
4. *9 hundreds + 5 tens + 5 ones* is another name for 955.

B Find each sum.

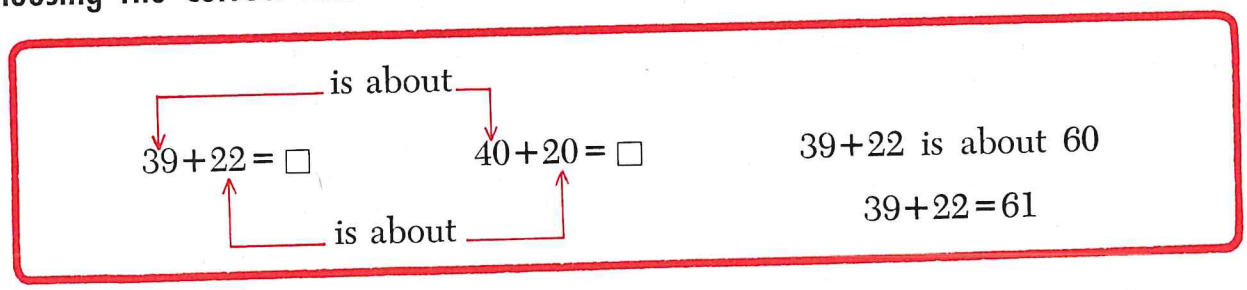
	a	*b*	*c*	*d*	*e*
1.	154 +261 415	170 +289 459	283 +288 571	251 +369 620	116 +399 515
2.	124 227 +194 545	142 273 +288 703	403 364 +211 978	460 187 +300 947	338 493 +101 932

Can you do this? Find the numeral to replace each ■ in order to make the addition correct.

1. 195 + 34■ + 6■9 = 1■51 — 195 + 347 + 609 = 1151
2. 32■ + 1■2 + ■89 = 938 — 327 + 122 + 489 = 938
3. 9■9 + 22■ + ■66 = 1887 — 999 + 222 + 666 = 1887

NAME_____ My Score:_____ Perfect Score A-B: 13

Choosing the Correct Answer



A Study the exercise above. Answer the following questions concerning the equation 71+33=□.

1. 71 is about 70.
2. 33 is about 30.
3. Therefore, □ is about 100.
4. In 71+33=□, □= 104.

B In each problem below you are given a choice of four possible answers. Underline the correct answer.

Work space

1. Danny's father drove 129 miles on Monday and 118 miles on Tuesday. How many miles did he drive altogether?

   247 8 117 104

2. There are 19 sugar cookies and 38 peanut butter cookies. How many cookies are there in all?

   19 57 80 6

3. Jack is reading a book that is 246 pages long. He has read 38 pages. How many more pages has he to read?

   200 208 15 91

4. Jane had $1.57. She paid $.38 for a box of cookies. How much did she have left?

   $1.19 $.73 $1.95 $1.00

5. Annette read 32 pages of a book on Monday, 31 pages on Tuesday, and 29 pages on Wednesday. How many pages did she read on those three days?

   200 81 120 92

NAME_____ My Score:_____ Perfect Score A-B: 8

Problem Solving

Solve the following problems.

Work space

1. The Boy Scout troop hiked 45 miles on Monday, 38 miles on Tuesday, and 23 miles on Wednesday. How many miles did they travel in three days?

Arithmetic sentence: 45+38+23=□

Answer: They traveled 106 miles.

1.

2. Betty paid $4.50 for new fenders for her bicycle. She paid $6.00 for new tires and 75¢ for a new bell. How much did she spend in all?

Arithmetic sentence: 450+600+75=□

Answer: She spent $11.25 in all.

2.

3. Last month Richard had 646 stamps in his collection. Today he has 900 stamps. How many stamps did he get within the last month?

Arithmetic sentence: 900−646=□

Answer: He got 254 stamps in the last month.

3.

4. In the garden there were 3 tomato plants, 4 pepper plants, 19 onion plants, and 7 strawberry plants. How many plants were there altogether?

Arithmetic sentence: 3+4+19+7=□

Answer: There were 33 plants.

4.

Can you do this? Solve the following problem.

Mr. Smith traveled 8024 miles last year. This year he traveled 1002 miles. How far did he travel in the two years?

Arithmetic sentence: 8024+1002=□

Answer: He traveled 9026 miles.

NAME_____ My Score:_____ Perfect Score: 8

Changing the Form of Hundreds to Thousands

829	———	1 thousand +	8 hundreds + 2 tens +	9 ones
+417	———	+	4 hundreds + 1 ten +	7 ones
1246	———	1 thousand +	(1)2 hundreds + 4 tens +	(1)6 ones

A Write the correct numeral in each ____.

1. 1200 = 1 thousand + 2 hundreds.
2. 2345 = 2 thousands + 3 hundreds + 4 tens + 5 ones.

B Write the numeral for each of the following.

1. Three thousand, six hundred twenty-one 3621
2. Seven thousand, one hundred sixty-nine 7169
3. One thousand, four hundred four 1404
4. Three thousand, two hundred thirty-four 3234
5. Six thousand, two hundred nine 6209
6. Five thousand, two hundred forty-six 5246
7. Nine thousand, nine hundred ninety-nine 9999
8. Eight thousand, one 8001

C Find each sum.

	a	*b*	*c*	*d*	*e*
1.	759 + 230 = 989	157 + 842 = 999	315 + 734 = 1049	821 + 749 = 1570	874 + 999 = 1873
2.	462 + 826 = 1288	576 + 798 = 1374	465 + 894 = 1359	972 + 383 = 1355	543 + 789 = 1332

NAME _____ My Score: _____ Perfect Score A-C: 19

Addition with a Four-Digit Number

8271	8 thousands +	2 hundreds +	7 tens +	1 one
299		2 hundreds +	9 tens +	9 ones
+1217	+1 thousand +	2 hundreds +	1 ten +	7 ones
9787	9 thousands +	7 hundreds +	(1)8 tens +	(1)7 ones

(1) ← (1) ←

♦ Add thousands in the same way that you add hundreds, tens, or ones.

A Do the following additions. Write the correct numeral in each □. Find the sum for the column addition.

8 thousands + 2 hundreds + 7 tens + 5 ones
+1 thousand + 4 hundreds + 1 ten + 2 ones

□ thousands + □ hundreds + □ tens + □ ones

9 thousands + 6 hundreds + 8 tens + 7 ones

```
 8275
+1412
------
 9687
```

B Find each sum.

	a	*b*	*c*	*d*	*e*
1.	2759 +150 2909	4157 +942 5099	3215 +834 4049	3421 +295 3716	8329 +750 9079
2.	4645 +494 5139	6790 +436 7226	2465 +853 3318	8921 +695 9616	3237 +881 4118
3.	8032 +989 9021	3975 +496 4471	1974 +856 2830	1274 +869 2143	6498 +729 7227
4.	773 6798 104 +201 7876	77 1184 811 +715 2787	240 12 313 +1816 2381	17 1114 821 +715 2667	167 4395 571 +618 5751

NAME_____ My Score:_____ Perfect Score A-B: 22

Adding Four-Digit Numbers

		1 ←	1 ←	1 ←
4574	———	4 thousands +	5 hundreds +	7 tens +	4 ones
+3498	———	+3 thousands +	4 hundreds +	9 tens +	8 ones
8072	———	8 thousands +	⑩ hundreds +	⑰ tens +	⑫ ones

A Write the correct numeral in each ____.

1. 8+4=12, so write 2 in ones place and add 1 ten in tens place.
2. 10+70+90=170, so write 7 in tens place and add 1 hundred in hundreds place.
3. 100+500+400=1000, so write 0 in hundreds place and add 1 thousand in thousands place.
4. 1000+4000+3000=8000, so write 8 in thousands place.

B Find each sum.

	a	*b*	*c*	*d*	*e*
1.	6234 +1879 8113	2535 +2186 4721	7214 +1087 8301	4155 +3982 8137	7412 +1598 9010
2.	1643 5572 +2709 9924	2011 3080 +1111 6202	4302 1411 +1822 7535	2864 1476 +2014 6354	5283 1849 +2140 9272
3.	3344 1912 1876 +2323 9455	1575 2814 1878 +2921 9188	1124 1963 1721 +1647 6455	2975 1413 1483 +2916 8787	1776 2923 1806 +3493 9998
4.	$21.12 +14.00 $35.12	$18.79 +50.30 $69.09	$ .22 +18.99 $19.21	$ 9.44 +38.98 $48.42	$10.98 +10.98 $21.96

NAME_____ My Score:_____ Perfect Score A-B: 21

Use after textbook page 180.

Solving Problems

Solve each problem.

Work space

1. The gas station on 8th Street sold 4,684 gallons of gasoline. The station on 9th Street sold 3,417 gallons. How much gasoline was sold at the two stations?

Arithmetic sentence: 4684+3417=□

Answer: The two stations sold 8101 gallons of gasoline.

1.

2. Linda spent $4.95 for one book and $3.74 for another book. She also spent $1.29 for paper and a notebook. How much money did she spend in all?

Arithmetic sentence: 495+374+129=□

Answer: She spent $9.98 in all.

2.

3. The Boy Scouts collected 156 pounds of newspaper on Monday, 263 pounds on Tuesday, and 1220 pounds on Wednesday. How much paper did they collect altogether?

Arithmetic sentence: 156+263+1220=□

Answer: They collected 1639 pounds altogether.

3.

4. There were 92 children at the picnic, and 39 of them left early. How many children remained at the picnic?

Arithmetic sentence: 92−39=□

Answer: 53 children remained.

4.

Can you do this? Write the correct numeral for each ■.

1. ■21 + 8■4 + 2■ = 1624 — 721 + 874 + 29 = 1624

2. 9■2 + ■27 + 10■ = 1348 — 912 + 327 + 109 = 1348

3. 74 + 1■21 + 8■3 = 226■ — 74 + 1321 + 873 = 2268

NAME_____ My Score:_____ Perfect Score: 8

Checkup for Chapter 11

A Find each sum.

	a	*b*	*c*	*d*	*e*
1.	832 +89 921	466 +78 544	328 +84 412	614 +97 711	725 +47 772
2.	268 +921 1189	386 +813 1199	468 +710 1178	437 +662 1099	475 +813 1288
3.	324 7295 +104 7723	679 3421 +578 4678	825 7261 +327 8413	416 4812 +186 5414	981 5413 +574 6968
4.	1011 1041 3489 +1204 6745	329 2732 4065 +2807 9933	748 1116 6854 +1036 9754	1698 246 6952 +1079 9975	1740 2121 3296 +1903 9060

B Solve the following problems.

Work space

1. The library had 6723 books in May. It got 1778 more books in June and 829 more books in July. How many books did the library have then?

Arithmetic sentence: 6723+1778+829=□

Answer: There were 9330 books then.

1.

2. The Red Cross collected $7,253 in the last month. They hope to get $1,747 more. How much do they plan to collect altogether?

Arithmetic sentence: 7253+1747=□

Answer: They plan to collect $9000 altogether.

2.

NAME_____ My Score:_____ Perfect Score A-B: 24

Changing the Form in Subtraction

Use after textbook page 187.

854	———	8 hundreds + 5 tens + 14 ones
−89	———	− 8 tens + 9 ones
765	———	7 hundreds + 6 tens + 5 ones

(7 + ① → 14 + ①)

A Write the correct word or numeral in each ____.

1. To subtract 89 from 854, the form of the tens and of the hundreds must be changed.
2. 5 tens are thought of as 4 tens + 1 ten.
3. 8 hundreds are thought of as 7 hundreds + 1 hundreds.

B Find each difference.

	a	*b*	*c*	*d*	*e*	*f*
1.	548 − 61 = 487	745 − 73 = 672	476 − 94 = 382	842 − 81 = 761	384 − 92 = 292	564 − 73 = 491
2.	724 − 92 = 632	765 − 83 = 682	486 − 93 = 393	574 − 82 = 492	385 − 93 = 292	967 − 72 = 895
3.	723 − 74 = 649	345 − 67 = 278	453 − 64 = 389	752 − 73 = 679	827 − 49 = 778	645 − 66 = 579

Can you do this? Solve the following problem.

Work space

Of the 454 children in Graymont School, 35 were in 8th grade and 30 were in 7th grade. How many children were in all the other grades?

Arithmetic sentence: $454-(35+30)=\square$

Answer: There were 389 children in all the other grades.

NAME_____ My Score:____ Perfect Score A-B: 20

Practice in Subtraction

Find each difference and check your work.

	a	*b*	*c*	*d*	*e*
1.	475 −89 386 +89 475	725 −38 687	976 −87 889	429 −80 349	986 −97 889
2.	485 −25 460	595 −46 549	647 −95 552	453 −36 417	212 −83 129
3.	376 −94 282	465 −71 394	568 −45 523	724 −77 647	681 −32 649

Can you do this? Rearrange the digits in each numeral below in order to name the smallest and the largest possible numbers.

		Smallest	Largest
1.	1001	0011	1100
2.	7846	4678	8764
3.	2222	2222	2222
4.	3461	1346	6431
5.	8079	0789	9870

NAME_____ My Score:_____ Perfect Score: 14

Problem Solving

Solve each problem.

Work space

1. There were 222 tickets for the school play. All but 39 were sold. How many tickets were sold?

Arithmetic sentence: $222-39=\square$

Answer: 183 tickets were sold.

1.

2. Of the 437 children in the Longfellow School, 21 children were absent during the cold weather. How many children were not absent?

Arithmetic sentence: $437-21=\square$

Answer: 416 were not absent.

2.

3. Sally measured her bedroom and found it to be 134 inches long and 98 inches wide. The room is how many inches longer than it is wide?

Arithmetic sentence: $134-89=\square$

Answer: The room was 45 inches (or 3 ft. 9 in.) longer.

3.

4. Melissa's wading pool holds 245 gallons of water. Her father put 79 gallons of water in the pool. How much more water can be put in the pool?

Arithmetic sentence: $245-79=\square$

Answer: 166 gallons more can be put in the pool.

4.

5. Mr. Johnson had 1025 books in his personal library, and his wife had 728 books. Their son Jimmy had 16 books. How many books did the three people have?

Arithmetic sentence: $1025+728+16=\square$

Answer: They had 1769 books altogether.

5.

NAME_____ My Score:_____ Perfect Score: 10

Subtracting Numbers That Stand for Money

$7.78	7 dollars + 17 dimes + 8 cents		778
−.91	− 9 dimes + 1 cent		−91
$6.87	6 dollars + 8 dimes + 7 cents		687

A Write the correct numeral in each ____.

1. *8 cents − 1 cent* is another name for 7 cents.
2. *17 dimes − 9 dimes* is another name for 8 dimes.
3. *$6.87* is another name for 6 dollars + 87 cents.

B Find each difference.

	a	*b*	*c*	*d*	*e*
1.	$3.25 −.54 $2.71	$9.45 −.23 $9.22	$6.23 −.45 $5.78	$7.52 −.43 $7.09	$5.43 −.12 $5.31
2.	$3.24 −.32 $2.92	$5.73 −.64 $5.09	$3.54 −.46 $3.08	$6.74 −.56 $6.18	$9.54 −.72 $8.82

C Solve each problem.

Work space

1. Sue had $4.53 in her bank. If she spent $1.74, how much money would she have left?

Arithmetic sentence: 453 − 174 = □

Answer: She would have $2.79 left.

2. Albert had $5.46 in his bank. He spent all but $1.78. How much money did he spend?

Arithmetic sentence: 546 − 178 = □

Answer: He spent $3.68.

NAME _____ My Score: _____ Perfect Score A-C: 17

Estimating and Problem Solving

Use after textbook page 195.

A Solve each problem.

Work space

1. There were 119 girls and 23 boys in the yard. How many more girls than boys were in the yard?

1.

Arithmetic sentence: $119-23=\square$

Answer: There were 96 more girls than boys.

2. The school records show that 139 children were absent in January and 129 were absent in February. How many children were absent in the two months?

2.

Arithmetic sentence: $139+129=\square$

Answer: 268 children were absent.

3. In Jim's school there are 154 Cub Scouts. In Ted's school 89 are Cub Scouts. How many more Cub Scouts are there in Jim's school than are in Ted's school?

3.

Arithmetic sentence: $154-89=\square$

Answer: There are 65 more Cub Scouts in Jim's school.

B Circle a sensible answer after each problem. Then solve each problem.

Work space

1. Mr. Brown sold tickets for a boat ride. He sold 127 tickets one day and 178 the next day. How many tickets did he sell? (50, 240, (310))

1.

Arithmetic sentence: $127+178=\square$

Answer: He sold 305 tickets.

2. Mrs. Cooke sold 319 bags of popcorn one day and 208 bags the next day. How many more bags of popcorn were sold the first day than were sold the second day? (500, 85, (110))

2.

Arithmetic sentence: $319-208=\square$

Answer: 111 more bags of popcorn were sold the first day.

NAME_____ My Score:_____ Perfect Score: 9

Checkup for Chapter 12

A Find each difference.

	a	*b*	*c*	*d*	*e*
1.	387 − 43 = 344	836 − 24 = 812	476 − 45 = 431	286 − 47 = 239	687 − 49 = 638
2.	826 − 64 = 762	654 − 73 = 581	473 − 92 = 381	678 − 82 = 596	476 − 83 = 393

B Find each difference.

1. 126 − 65 = □ ; □ = 61

2. 187 − 56 = □ ; □ = 131

3. 234 − 34 = □ ; □ = 200

C Solve each problem.

Work space

1. Danny spent $.84 for lunch, $1.15 for a book, and $.95 for school supplies. How much did he spend?

Arithmetic sentence: 84+115+95=□

Answer: He spent $2.94.

2. Dick's father drove 315 miles the first day and 94 miles the second day. How many more miles did he drive the first day than he did the second day?

Arithmetic sentence: 315−94=□

Answer: He drove 221 more miles on the first day.

3. The circus clown had 164 red and green balloons. If 89 balloons were red, how many balloons were green?

Arithmetic sentence: 164−89=□

Answer: 75 balloons were green.

NAME _____ My Score: _____ Perfect Score A-C: 19

Use after textbook page 202.

Changing the Form of Hundreds and Tens

573	5 hundreds + 7 tens + 13 ones	400 + 160 + 13
−298	2 hundreds + 9 tens + 8 ones	200 + 90 + 8
275	2 hundreds + 7 tens + 5 ones	200 + 70 + 5

(4 + ① → 16 + ①)

A Mark X before each equation below in which the minuend must be changed in order to subtract. Mark 0 if the minuend does not have to be changed.

1. X $403-174=\square$
2. 0 $517-101=\square$
3. 0 $429-216=\square$
4. X $927-866=\square$

B Find each difference.

	a	*b*	*c*	*d*	*e*
1.	805 − 465 = 340	703 − 531 = 172	629 − 265 = 364	312 − 181 = 131	425 − 162 = 263
2.	300 − 195 = 105	703 − 358 = 345	802 − 548 = 254	407 − 309 = 98	206 − 197 = 9
3.	704 − 426 = 278	901 − 642 = 259	437 − 253 = 184	843 − 250 = 593	807 − 379 = 428

Can you do this? Find the numeral to replace each ■ in order to make each subtraction correct. There is only one correct numeral for each ■.

1. 82■ − 4■9 = ■33 — 822 − 489 = 333
2. 1■0■ − 615 = 3■5 — 1000 − 615 = 385
3. 55■ − ■9 = ■56 — 555 − 99 = 456

NAME_____ My Score:_____ Perfect Score A-B: 17

Problem Solving

Solve each problem. Check your answer.

Work space

1. Mr. Brown's garden hose is 60 feet long. He needs a hose 75 feet long to reach his back yard. How much more hose does he need?

Arithmetic sentence: $75-60=\square$

Answer: He needs 15 feet more.

1.

2. Sally has $2.45 in her bank. Jane has $3.05 and June has $3.25. How much money do the girls have?

Arithmetic sentence: $245+305+325=\square$

Answer: They have $8.75 altogether.

2.

3. Bill's father weighs 206 pounds. His mother weighs 137 pounds. What is the difference between their weights?

Arithmetic sentence: $206-137=\square$

Answer: The difference is 69 pounds.

3.

4. Betty went shopping. She spent $4.09, $2.56, and $3.76. How much in all did she spend?

Arithmetic sentence: $409+256+376=\square$

Answer: She spent $10.41 altogether.

4.

Can you do this? Solve the following problem.

There were 925 flower plants in the park. 374 were tulips, 412 were lilies, and the rest were pansies. How many pansy plants were in the park?

Arithmetic sentence: $925-(412+374)=\square$

Answer: There were 139 pansy plants.

NAME_____ My Score:_____ Perfect Score: 8

Changing the Form of Thousands to Hundreds

Use after textbook page 208.

3417		3 thousands + 4 hundreds + 1 ten + 7 ones
−1712		1 thousand + 7 hundreds + 1 ten + 2 ones
1705		1 thousand + 7 hundreds + 0 tens + 5 ones

A Write the correct numeral in each _____.

1. Before we can subtract 1712 from 3417, 3 thousands + 4 hundreds + 1 ten + 7 ones must be changed to 2 thousands + 14 hundreds + 1 ten + 7 ones.

2. 1705 means 1 thousands + 7 hundreds + 0 tens + 5 ones.

B Find each difference.

	a	*b*	*c*	*d*	*e*
1.	8681 − 1361 = 7320	3241 − 1200 = 2041	8649 − 5316 = 3333	1202 − 1001 = 201	1096 − 1081 = 15
2.	9642 − 832 = 8810	8586 − 643 = 7943	8169 − 334 = 7835	6501 − 4701 = 1800	4834 − 2932 = 1902
3.	7234 − 121 = 7113	2222 − 100 = 2122	8074 − 133 = 7941	6249 − 843 = 5406	6294 − 122 = 6172
4.	1843 − 601 = 1242	3457 − 302 = 3155	8047 − 323 = 7724	3410 − 1600 = 1810	7964 − 5432 = 2532
5.	6347 − 3423 = 2924	6634 − 2412 = 4222	7195 − 4362 = 2833	7193 − 3061 = 4132	3889 − 1850 = 2039

NAME _____ My Score: _____ Perfect Score A-B: 27

Estimating Answers

Circle a sensible answer after each problem. Then solve each problem.

Work space

1. The sale price of a bicycle is $28.90. The regular price was $35.95. How much do you save if you buy the bicycle at the sale price?

$65.00 (**$7.00**) $20.00

Arithmetic sentence: 3595−2890=□

Answer: You would save $7.05.

2. John rode 8 blocks on his bicycle on Monday, 12 blocks on Tuesday, and 14 blocks on Wednesday. How many blocks did he cover in the three days?

3 25 (**30**)

Arithmetic sentence: 8+12+14=□

Answer: He rode 34 blocks.

3. Betty planted 25 tomato plants, 16 onion plants, and 11 pepper plants in her garden. How many plants did she plant altogether?

(**50**) 80 205

Arithmetic sentence: 25+16+11=□

Answer: She planted 52 plants.

4. Mother spent $14.27 at the supermarket and $3.19 at the drugstore. How much more did mother spend at the supermarket?

$17.46 $21.00 (**$11.00**)

Arithmetic sentence: 1427−319=□

Answer: She spent $11.08 more at the supermarket.

NAME_____ My Score:_____ Perfect Score: 12

Use after textbook page 210.

Changing the Form of Thousands, Hundreds, and Tens

		4 +① → 11 +① → 16 +① ↘
5276	———	5 thousands + 2 hundreds + 7 tens + 16 ones
−2889	———	2 thousands + 8 hundreds + 8 tens + 9 ones
2387	———	2 thousands + 3 hundreds + 8 tens + 7 ones

A Write the correct numeral in each ____.

1. Before we can subtract 2889 from 5276, 5 thousands + 2 hundreds + 7 tens + 6 ones must be changed to 4 thousands + 11 hundreds + 16 tens + 16 ones.

2. 2387 is another name for 2 thousands + 3 hundreds + 8 tens + 7 ones.

B Find each difference.

	a	*b*	*c*	*d*
1.	3564 −1675 1889	7923 −3846 4077	6412 −2534 3878	3954 −1976 1978
2.	8435 −2676 5759	6528 −3749 2779	7002 −3214 3788	9006 −3647 5359
3.	3008 −1679 1329	5007 −2358 2649	4008 −2359 1649	5003 −2376 2627
4.	4154 −2318 1836	8830 −5654 3176	4993 −3271 1722	7186 −3289 3897
5.	5284 −1365 3919	5261 −2445 2816	7371 −4378 2993	4468 −1919 2549

NAME_____ My Score:_____ Perfect Score A-B: 25

Checkup for Chapter 13

A Find each difference.

	a	*b*	*c*	*d*
1.	1891 − 1781 = 110	607 − 349 = 258	7058 − 445 = 6613	6082 − 2150 = 3932
2.	5236 − 2312 = 2924	9158 − 439 = 8719	2954 − 517 = 2437	523 − 488 = 35
3.	6812 − 2735 = 4077	4007 − 2329 = 1678	6075 − 3009 = 3066	6260 − 3267 = 2993

B Solve each problem.

Work space

1. Mrs. Jones bought $5.65 worth of gasoline. How much change will she get if she gives the man $20.00?

Arithmetic sentence: $2000 - 565 = \square$

Answer: She will get $14.35.

1.

2. There were 6,690 books in the school library. Then the school board purchased 882 more books. How many books are there now?

Arithmetic sentence: $6690 + 882 = \square$

Answer: There are 7572 books now.

2.

3. The baker delivered 750 rolls for the school picnic. If 1,267 children are attending the picnic, and each child wants one roll, how many more rolls are needed?

Arithmetic sentence: $1267 - 750 = \square$

Answer: 517 more rolls are needed.

3.

NAME_____ My Score:_____ Perfect Score A-B: 18

Multiplication and Addition

Use after textbook page 217.

♦ Multiplication is repeated addition.

Addition	Multiplication	
$2+2+2+2=8$	$4\times2=8$	2 multiplicand
$2+2+2+2=4\times2$		$\times4$ multiplier
		8 product

A Write the correct numeral in each ____.

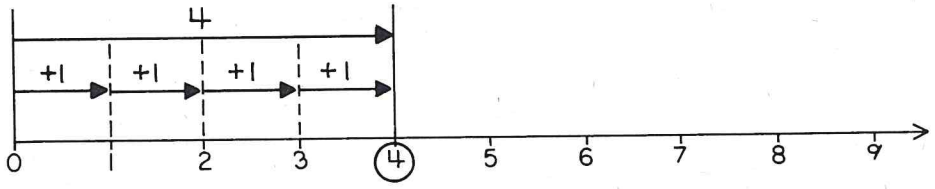
1. $2+2+2+$ 2 $=4\times2$
2. $2+2+2=$ 3 $\times2$
3. $4+4+4+4=4\times$ 4
4. $4+4=$ 2 $\times4$

B Find each sum or product.

	a	*b*	*c*	*d*
1.	$1+1=\square$ $\square=2$	$2\times1=\square$ $\square=2$	$2+2=\square$ $\square=4$	$2\times2=\square$ $\square=4$
2.	$3+3=\square$ $\square=6$	$2\times3=\square$ $\square=6$	$4+4=\square$ $\square=8$	$2\times4=\square$ $\square=8$
3.	$5+5=\square$ $\square=10$	$2\times5=\square$ $\square=10$	$1+1+1=\square$ $\square=3$	$3\times1=\square$ $\square=3$
4.	$2+2+2=\square$ $\square=6$	$3\times2=\square$ $\square=6$	$3+3+3=\square$ $\square=9$	$3\times3=\square$ $\square=9$
5.	$4+4+4=\square$ $\square=12$	$3\times4=\square$ $\square=12$	$5+5+5=\square$ $\square=15$	$3\times5=\square$ $\square=15$
6.	$1+1+1+1=\square$ $\square=4$	$4\times1=\square$ $\square=4$	$2+2+2+2=\square$ $\square=8$	$4\times2=\square$ $\square=8$
7.	$3+3+3+3=\square$ $\square=12$	$4\times3=\square$ $\square=12$	$4+4+4+4=\square$ $\square=16$	$4\times4=\square$ $\square=16$

NAME_____ My Score:_____ Perfect Score A-B: 26

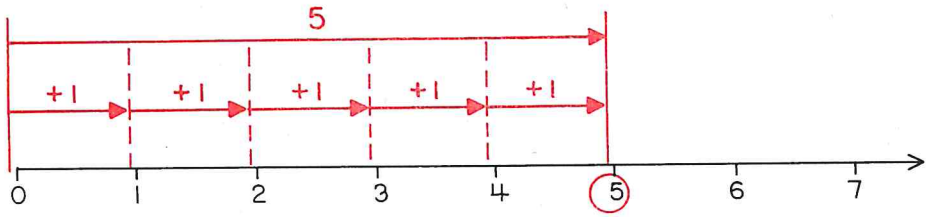
Using 1 in Multiplication



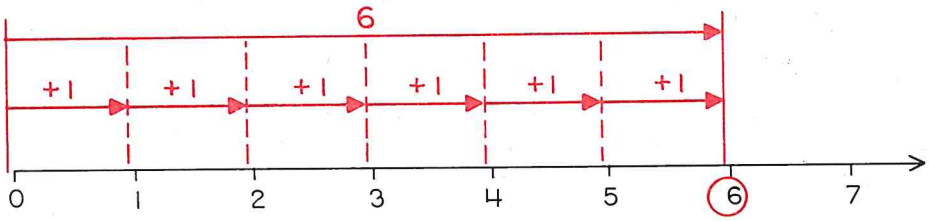
♦ The number line shows that $4 \times 1 = 1+1+1+1$, and it also shows that $1 \times 4 = 4 \times 1$.

A On the number lines below, show the multiplications indicated.

1. $1 \times 5 = \square$ or $5 \times 1 = \square$



2. $1 \times 6 = \square$ or $6 \times 1 = \square$



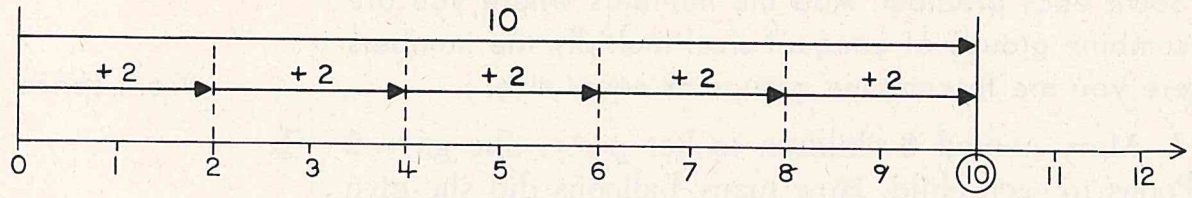
B Find the correct numeral for each □.

	a	*b*		*a*	*b*
1.	$1 \times 5 = \square$ $\square = 5$	$5 \times \square = 5$ $\square = 1$	**5.**	$1 \times 1 = \square$ $\square = 1$	$1 \times \square = 7$ $\square = 7$
2.	$7 \times \square = 7$ $\square = 1$	$1 \times 7 = \square$ $\square = 7$	**6.**	$2 \times \square = 2$ $\square = 1$	$\square \times 4 = 4$ $\square = 1$
3.	$9 \times 1 = \square$ $\square = 9$	$1 \times \square = 9$ $\square = 9$	**7.**	$8 \times 1 = \square$ $\square = 8$	$1 \times \square = 3$ $\square = 3$
4.	$\square \times 1 = 8$ $\square = 8$	$8 \times \square = 8$ $\square = 1$	**8.**	$4 \times \square = 4$ $\square = 1$	$9 \times \square = 9$ $\square = 1$

NAME_____ My Score:_____ Perfect Score A-B: 16

Use after textbook page 222.

Using 2 in Multiplication



♦ The number line shows that $5\times2=2+2+2+2+2=10$.

A Study the number line above and then write the correct numeral in each ___ below.

1. $1\times2=$ 2
2. $2\times2=$ 4
3. $3\times2=$ 6
4. $6\times2=$ 12
5. $4\times2=$ 8
6. $5\times2=$ 10

B Find each product.

	a	*b*	*c*	*d*
1.	2 × 4 = 8	2 × 1 = 2	2 × 2 = 4	2 × 5 = 10
2.	4 × 2 = 8	7 × 2 = 14	3 × 2 = 6	8 × 2 = 16
3.	2 × 3 = 6	2 × 6 = 12	2 × 7 = 14	2 × 8 = 16
4.	2 × 9 = 18	5 × 2 = 10	9 × 2 = 18	6 × 2 = 12

C Replace each □ with the correct numeral.

1. $2\times7=\square$; $\square=$ 14
2. $\square\times9=18$; $\square=$ 2
3. $6\times\square=12$; $\square=$ 2
4. $2\times\square=4$; $\square=$ 2

NAME _____ My Score: _____ Perfect Score A-C: 23

Problem Solving

Solve each problem. Add the numbers where you are to combine groups of unequal size. Multiply the numbers where you are to combine groups of equal size.

Work space

1. Mary invited 6 children to her party. She gave 2 balloons to each child. How many balloons did she give to her friends at the party?

Arithmetic sentence: 6×2=□ or 2×6=□

Answer: She gave 12 balloons to her friends.

1.

2. There are 5 reading tables in the library. If 3 children sit at each table, how many children are at the reading tables altogether?

Arithmetic sentence: 5×3=□ or 3×5=□

Answer: 15 children sit at the reading tables.

2.

3. Jack gave 3 marbles to each of his 5 friends. How many marbles did he give altogether?

Arithmetic sentence: 3×5=□ or 5×3=□

Answer: He gave 15 marbles altogether.

3.

4. Tommy collected 31 pounds of paper on Monday, 30 pounds on Tuesday, and 32 pounds on Wednesday. How many pounds of paper did he collect in the three days?

Arithmetic sentence: 31+30+32=□

Answer: He collected 93 pounds of paper.

4.

Can you do this? Replace each ■ in the following multiplications.

1. $\begin{array}{r} 1 \\ \times\blacksquare \\ \hline 1 \end{array}$ $\begin{array}{r} 1 \\ \times 1 \\ \hline 1 \end{array}$

2. $\begin{array}{r} 6 \\ \times\blacksquare \\ \hline 12 \end{array}$ $\begin{array}{r} 6 \\ \times 2 \\ \hline 12 \end{array}$

3. $\begin{array}{r} 2 \\ \times\blacksquare \\ \hline 18 \end{array}$ $\begin{array}{r} 2 \\ \times 9 \\ \hline 18 \end{array}$

NAME_____ My Score:_____ Perfect Score: 8

Using 3 in Multiplication

Use after textbook page 226.

$3+3+3+3=12$ ——— ♦ The sum of 4 threes is 12.

$$\begin{array}{r} 3 \\ 3 \\ 3 \\ +3 \\ \hline 12 \end{array}$$

$4\times3=12$ ——— ♦ The product of 4 and 3 is 12.

$$\begin{array}{r} 3 \\ \times 4 \\ \hline 12 \end{array}$$

A Write T before each true statement and F before each false statement.

T 1. $3+3+3+3$ is another name for 4×3.

F 2. $4+4+4+4$ is another name for 5×4.

B Find each product.

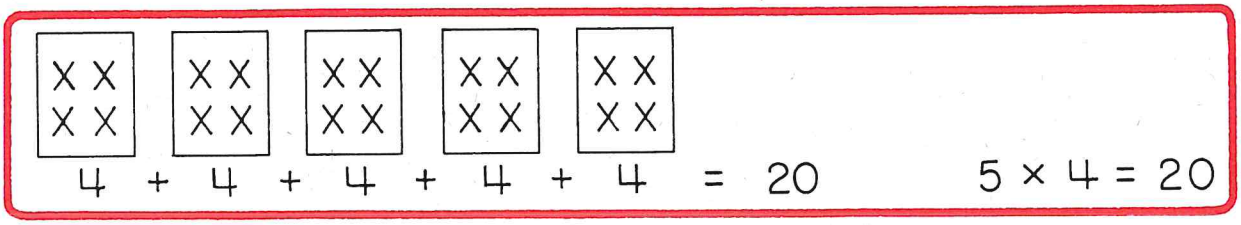
	a	*b*	*c*	*d*	*e*
1.	$\begin{array}{r} 3 \\ \times 2 \\ \hline 6 \end{array}$	$\begin{array}{r} 3 \\ \times 7 \\ \hline 21 \end{array}$	$\begin{array}{r} 3 \\ \times 5 \\ \hline 15 \end{array}$	$\begin{array}{r} 3 \\ \times 9 \\ \hline 27 \end{array}$	$\begin{array}{r} 3 \\ \times 8 \\ \hline 24 \end{array}$
2.	$\begin{array}{r} 2 \\ \times 3 \\ \hline 6 \end{array}$	$\begin{array}{r} 1 \\ \times 3 \\ \hline 3 \end{array}$	$\begin{array}{r} 4 \\ \times 3 \\ \hline 12 \end{array}$	$\begin{array}{r} 6 \\ \times 3 \\ \hline 18 \end{array}$	$\begin{array}{r} 3 \\ \times 3 \\ \hline 9 \end{array}$

C Write the correct numeral for each □.

	a	*b*	*c*	*d*
1.	$8\times\square=24$	$3\times\square=24$	$3\times\square=3$	$4\times3=\square$
	$\square=$ 3	$\square=$ 8	$\square=$ 1	$\square=$ 12
2.	$\square\times6=18$	$5\times\square=15$	$1\times\square=3$	$\square\times4=12$
	$\square=$ 3	$\square=$ 3	$\square=$ 3	$\square=$ 3

NAME _____ My Score: _____ Perfect Score A-C: 16

Using 4 in Multiplication



A Write the correct numeral or word in each _____ below.

1. To find the total numbers of X's in all the sets above, multiply the number of the sets by the number of X's in each set.

2. 4+4+4+4+4 is another name for 5 ×4.

B Find each product.

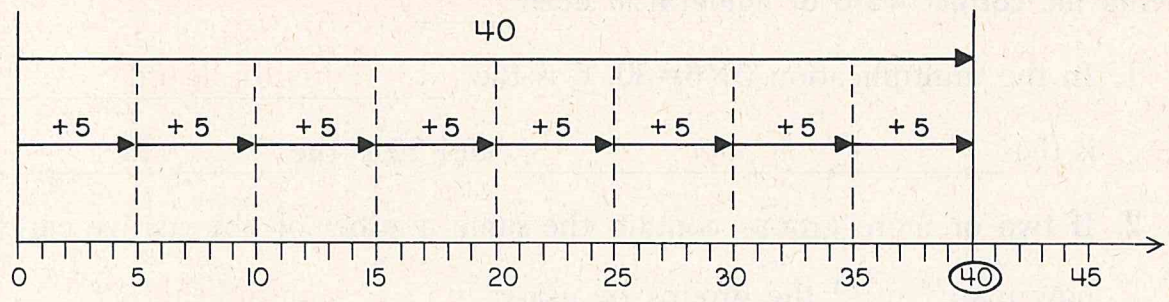
	a	*b*	*c*	*d*
1.	4 ×5 = 20	6 ×4 = 24	9 ×4 = 36	4 ×8 = 32
2.	5 ×4 = 20	4 ×3 = 12	4 ×7 = 28	4 ×9 = 36
3.	4 ×4 = 16	8 ×4 = 32	4 ×1 = 4	3 ×4 = 12
4.	7 ×4 = 28	4 ×6 = 24	4 ×2 = 8	1 ×4 = 4

Can you do this? Find the correct numeral for each □.

1. (2 ×2) ×2 = □ □ = 8
2. (1 ×1) ×1 = □ □ = 1
3. (3 ×3) ×3 = □ □ = 27

NAME _____ My Score: _____ Perfect Score A-B: 16

Using 5 in Multiplication



♦ The number line shows $8 \times 5 = 40$ and $5+5+5+5+5+5+5+5=40$.

A Write T before each true statement and F before each false statement.

T **1.** The number line above shows $8 \times 5 = 40$ by means of repeated addition.

T **2.** Multiplication of whole numbers can be shown on a number line.

F **3.** The number line also shows $5 \times 8 = 40$.

B Find each product.

	a	*b*	*c*	*d*	*e*
1.	5 ×9 = 45	5 ×2 = 10	5 ×3 = 15	5 ×5 = 25	5 ×6 = 30
2.	9 ×5 = 45	4 ×5 = 20	6 ×5 = 30	1 ×5 = 5	7 ×5 = 35
3.	5 ×1 = 5	8 ×5 = 40	5 ×4 = 20	2 ×5 = 10	5 ×8 = 40

C Find the correct numeral for each □.

1. □ × 2 = 10 — □ = 5

2. 6 × □ = 30 — □ = 5

3. 5 × 8 = □ — □ = 40

4. 5 × □ = 20 — □ = 4

NAME _____ My Score: _____ Perfect Score A-C: 20

Checkup for Chapter 14

A Write the correct word or numeral in each ____.

1. In the multiplication 5×6=30, 6 is the multiplicand, 5 is the multiplier, and 30 is the product.

2. If two or more groups contain the same number of objects, we can find how many in all the groups by using multiplication.

B Find each product.

	a	*b*	*c*	*d*	*e*
1.	9 ×5 = 45	8 ×1 = 8	2 ×9 = 18	7 ×3 = 21	6 ×4 = 24
2.	9 ×4 = 36	3 ×5 = 15	4 ×2 = 8	1 ×6 = 6	5 ×4 = 20

C Find the correct numeral for each □.

	a	*b*	*c*	*d*
1.	7×□=7 □=1	□×3=27 □=9	5×□=35 □=7	5×9=□ □=45
2.	9×□=45 □=5	8×3=□ □=24	6×□=30 □=5	9×2=□ □=18

D Solve this problem.

Work space

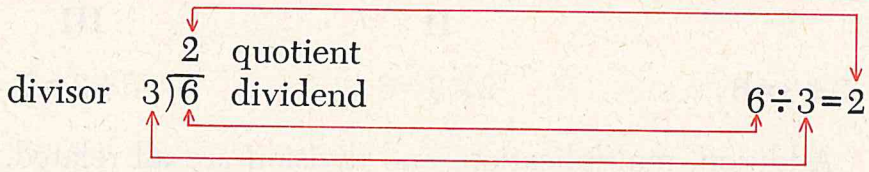
Mary took 4 books off each shelf in the bookcase. There were 7 shelves. How many books did she remove?

Arithmetic sentence: 4×7=□

Answer: She removed 28 books.

NAME_____ My Score:____ Perfect Score A-D: 24

Division



♦ To separate a large group into smaller groups of equal size, we use division to find the number in each group or the number of the groups.

A Study the example above and then write the correct numeral in each ____.

In the division 6÷2=3:

1. 2 is the divisor. 2. 3 is the quotient. 3. 6 is the dividend.

B Find each quotient.

	a	*b*	*c*	*d*
1.	$3\overline{)6}$ → 2	$2\overline{)6}$ → 3	$4\overline{)8}$ → 2	$4\overline{)4}$ → 1
2.	$2\overline{)8}$ → 4	$2\overline{)2}$ → 1	$2\overline{)4}$ → 2	$1\overline{)1}$ → 1
3.	8÷2=□	8÷4=□	4÷4=□	6÷3=□
	□=4	□=2	□=1	□=2
4.	6÷2=□	4÷2=□	9÷3=□	3÷3=□
	□=3	□=2	□=3	□=1

Can you do this? Solve the following problem.

Work space

Sally had 6 cupcakes. She wanted to give each of 3 friends the same number of cupcakes. How many can she give to each of her friends?

Arithmetic sentence: 6÷3=□

Answer: She can give each 2 cupcakes.

NAME_____ My Score:_____ Perfect Score A-B: 17

Addition, Multiplication, and Division

I	II	III
$3+3=6$	$2\times3=6$	$6\div3=2$

- Addition, multiplication, and division are all related.
- Knowing one will help you understand the other two.

A Write the correct numeral in each ____.

1. In **I** how many 3's are added to make 6? 2
2. In **II** by what number is 3 multiplied to make 6? 2
3. In **III** how many times is 3 contained in 6? 2

B Find the correct numeral for each ____.

	a	*b*	*c*	*d*
1.	$1+1=\square$ $\square=2$	$2\times1=\square$ $\square=2$	$1\times\square=2$ $\square=2$	$1\overline{)2}$ 2
2.	$2+2=\square$ $\square=4$	$2\times2=\square$ $\square=4$	$2\times\square=4$ $\square=2$	$2\overline{)4}$ 2
3.	$4+4=\square$ $\square=8$	$2\times4=\square$ $\square=8$	$2\times\square=8$ $\square=4$	$4\overline{)8}$ 2
4.	$3+3+3=\square$ $\square=9$	$3\times3=\square$ $\square=9$	$3\times\square=9$ $\square=3$	$3\overline{)9}$ 3
5.	$2+2+2=\square$ $\square=6$	$3\times2=\square$ $\square=6$	$3\times\square=6$ $\square=2$	$2\overline{)6}$ 3

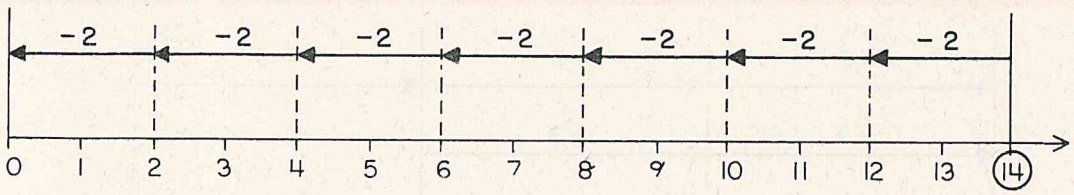
Can you do this? Replace each ■ with the correct numeral.

1. $4\overline{)12}$ ■ $4\overline{)12}$ 3
2. $\blacksquare\overline{)18}$ 2 $9\overline{)18}$ 2
3. $3\overline{)\blacksquare}$ 9 $3\overline{)27}$ 9

NAME_____ My Score:_____ Perfect Score A-B: 19

Use after textbook page 239.

Using Either 1 or 2 as a Divisor



♦ The number line shows by repeated subtraction that $14 \div 2 = 7$.

A Write the correct numeral in each ____.

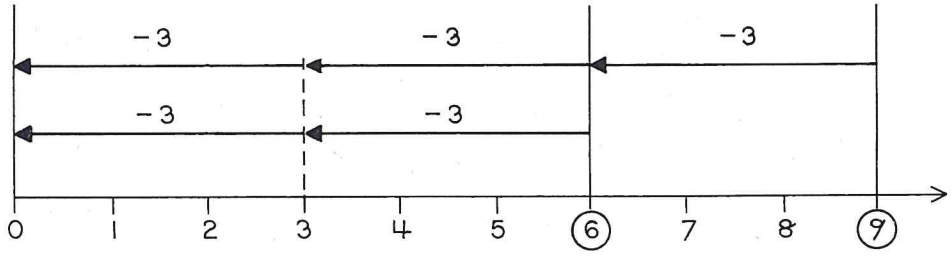
1. In going from 14 to 0, 2 is subtracted 7 times.
2. This means that $14 \div 2 =$ 7 .

B Find the correct numeral for each □.

	a	*b*	*c*	*d*
1.	$4 \times 1 = \square$ $\square =$ 4	$4 \div 1 = \square$ $\square =$ 4	$6 \times 2 = \square$ $\square =$ 12	$12 \div 2 = \square$ $\square =$ 6
2.	$5 \times 1 = \square$ $\square =$ 5	$5 \div 1 = \square$ $\square =$ 5	$3 \times 2 = \square$ $\square =$ 6	$6 \div 2 = \square$ $\square =$ 3
3.	$8 \times 1 = \square$ $\square =$ 8	$8 \div 1 = \square$ $\square =$ 8	$9 \times 2 = \square$ $\square =$ 18	$18 \div 2 = \square$ $\square =$ 9
4.	$6 \times 1 = \square$ $\square =$ 6	$6 \div 1 = \square$ $\square =$ 6	$2 \times 2 = \square$ $\square =$ 4	$4 \div 2 = \square$ $\square =$ 2
5.	$7 \times 1 = \square$ $\square =$ 7	$7 \div 1 = \square$ $\square =$ 7	$7 \times 2 = \square$ $\square =$ 14	$14 \div 2 = \square$ $\square =$ 7
6.	$1 \times 1 = \square$ $\square =$ 1	$1 \div 1 = \square$ $\square =$ 1	$8 \times 2 = \square$ $\square =$ 16	$16 \div 2 = \square$ $\square =$ 8
7.	$9 \times 1 = \square$ $\square =$ 9	$9 \div 1 = \square$ $\square =$ 9	$5 \times 2 = \square$ $\square =$ 10	$10 \div 2 = \square$ $\square =$ 5

NAME_____ My Score:_____ Perfect Score A-B: 28

Using 3 as a Divisor



♦ The number line shows $6 \div 3 = 2$ and $9 \div 3 = 3$.

A Answer the following questions.

1. In $6 \div 3 = 2$, how many times is 3 subtracted? 2
2. In $9 \div 3 = 3$, how many times is 3 subtracted? 3

B Find each quotient.

	a	*b*	*c*	*d*
1.	$3\overline{)12}$ → 4	$3\overline{)3}$ → 1	$3\overline{)6}$ → 2	$3\overline{)9}$ → 3
2.	$3\overline{)27}$ → 9	$3\overline{)18}$ → 6	$3\overline{)15}$ → 5	$3\overline{)21}$ → 7

C Find the correct numeral for each □.

	a	*b*	*c*	*d*
1.	$24 \div 3 = \square$ □ = 8	$21 \div \square = 7$ □ = 3	$18 \div 3 = \square$ □ = 6	$3 \div \square = 1$ □ = 3
2.	$9 \div \square = 3$ □ = 3	$\square \div 3 = 5$ □ = 15	$\square \div 3 = 8$ □ = 24	$24 \div \square = 8$ □ = 3
3.	$18 \div \square = 6$ □ = 3	$27 \div 3 = \square$ □ = 9	$21 \div 3 = \square$ □ = 7	$6 \div \square = 2$ □ = 3

NAME_____ My Score:_____ Perfect Score A-C: 20

Problem Solving

Solve each problem.

Work space

1. Al wants to divide his 12 marbles equally among his 2 friends. How many marbles will each of his friends receive?

Arithmetic sentence: $12 \div 2 = \square$

Answer: Each of his friends will receive 6 marbles.

1.

2. Mary had 18 paint brushes. She put 2 brushes on each desk. On how many desks did she put paint brushes?

Arithmetic sentence: $18 \div 2 = \square$

Answer: She put brushes on 9 desks.

2.

3. There were 3 books on the shelf to be divided equally among 3 children. How many books did each child receive?

Arithmetic sentence: $3 \div 3 = \square$

Answer: Each child received 1 book.

3.

4. There were 2 tables in the library. On each table were 8 books. How many books were on the 2 tables?

Arithmetic sentence: $2 \times 8 = \square$

Answer: There were 16 books on the 2 tables.

4.

5. Twenty-one boys were chosen for 7 teams in a spelling bee. How many boys were assigned to each team?

Arithmetic sentence: $21 \div 7 = \square$

Answer: There were 3 boys on each team.

5.

6. Caroline had 24 pieces of candy. She wanted to divide them equally among two friends and herself. How many pieces of candy did each person get?

Arithmetic sentence: $24 \div 3 = \square$

Answer: Each got 8 pieces of candy.

6.

NAME_____ My Score:_____ Perfect Score: 12

Using Either 4 or 5 as a Divisor

John had 10 marbles which he wanted to give to 5 of his friends.
He wanted all his friends to have the same number of marbles.

All of John's marbles in one group ——— (XXXXXXXXXX)

John's marbles in 5 groups of equal size ——— (XX)(XX)(XX)(XX)(XX)

Each of his friends got 2 marbles because $10 \div 5 = 2$.

A Write the correct numeral in each ____.

1. The numeral 10 stands for the total number of marbles.
2. The numeral 5 stands for the number of groups into which the marbles are to be separated.
3. The numeral 2 stands for the number of marbles in each group.

B Find the correct numeral for each □.

	a	*b*	*c*	*d*
1.	$25 \div 5 = \square$ $\square = 5$	$5 \times 5 = \square$ $\square = 25$	$36 \div 4 = \square$ $\square = 9$	$9 \times 4 = \square$ $\square = 36$
2.	$40 \div 5 = \square$ $\square = 8$	$8 \times 5 = \square$ $\square = 40$	$16 \div \square = 4$ $\square = 4$	$4 \times 4 = \square$ $\square = 16$
3.	$\square \div 5 = 7$ $\square = 35$	$7 \times \square = 35$ $\square = 5$	$\square \div 4 = 5$ $\square = 20$	$\square \times 4 = 20$ $\square = 5$
4.	$20 \div 5 = \square$ $\square = 4$	$4 \times 5 = \square$ $\square = 20$	$32 \div \square = 8$ $\square = 4$	$8 \times \square = 32$ $\square = 4$
5.	$30 \div \square = 6$ $\square = 5$	$\square \times 5 = 30$ $\square = 6$	$\square \div 4 = 7$ $\square = 28$	$7 \times 4 = \square$ $\square = 28$
6.	$\square \div 5 = 9$ $\square = 45$	$9 \times 5 = \square$ $\square = 45$	$12 \div 4 = \square$ $\square = 3$	$3 \times \square = 12$ $\square = 4$

NAME_____ My Score:_____ Perfect Score A-B: 25

Addition, Subtraction, Multiplication, and Division

A Find the sum, difference, product, or quotient as indicated.

	a	*b*	*c*	*d*	*e*
1.	8817 817 + 81 9715	1234 567 + 89 1890	12 345 +6789 7146	6789 345 + 12 7146	3207 1843 +2065 7115
2.	8743 −125 8618	5218 −4318 900	6666 −2020 4646	4203 −1818 2385	1875 −682 1193
3.	4 9)36	4 6)24	5 9)45	9 3)27	1 8)8
4.	5 ×8 40	5 ×0 0	9 ×3 27	7 ×2 14	1 ×9 9

B Solve the following problems, using either multiplication or division.

Work space

1. Mrs. Jones gave 4 cookies to each of the 6 girls who came to visit Sally. How many cookies did Mrs. Jones give away?

Arithmetic sentence: $4 \times 6 = \square$

Answer: She gave away 24 cookies.

1.

2. There were 35 children and 5 tables in Mrs. Smith's classroom. If the same number of children sat at each table, how many children were at each table?

Arithmetic sentence: $35 \div 5 = \square$

Answer: There were 7 children at each table.

2.

NAME_____ My Score:_____ Perfect Score A-B: 24

Using Either 6, 7, 8, or 9 as a Divisor

Use after textbook page 250.

$18 \div 6 = 3$	$28 \div 7 = 4$	$40 \div 8 = 5$	$45 \div 9 = 5$
$3 \times 6 = 18$	$4 \times 7 = 28$	$5 \times 8 = 40$	$5 \times 9 = 45$

A Write the correct numeral in each ____.

1. Since $2 \times 6 = 12$, $12 \div 6 =$ 2 .
2. Since $5 \times 7 = 35$, $35 \div 7 =$ 5 .
3. Since $4 \times 8 = 32$, $32 \div 8 =$ 4 .
4. Since $3 \times 9 = 27$, $27 \div 9 =$ 3 .

B Find each product.

	a	*b*	*c*	*d*	*e*
1.	$6\overline{)24}$ → 4	$6\overline{)36}$ → 6	$6\overline{)6}$ → 1	$6\overline{)12}$ → 2	$6\overline{)30}$ → 5
2.	$7\overline{)21}$ → 3	$7\overline{)7}$ → 1	$7\overline{)28}$ → 4	$7\overline{)35}$ → 5	$7\overline{)14}$ → 2
3.	$8\overline{)32}$ → 4	$8\overline{)24}$ → 3	$8\overline{)8}$ → 1	$8\overline{)16}$ → 2	$8\overline{)40}$ → 5
4.	$9\overline{)45}$ → 5	$9\overline{)18}$ → 2	$9\overline{)27}$ → 3	$9\overline{)9}$ → 1	$9\overline{)36}$ → 4

C Find the correct numeral for each □.

	a	*b*	*c*	*d*
1.	$18 \div 3 = \square$ $\square =$ 6	$27 \div 9 = \square$ $\square =$ 3	$35 \div \square = 5$ $\square =$ 7	$\square \div 6 = 5$ $\square =$ 30
2.	$\square \div 6 = 6$ $\square =$ 36	$7 \div \square = 1$ $\square =$ 7	$16 \div 8 = \square$ $\square =$ 2	$9 \div 9 = \square$ $\square =$ 1
3.	$40 \div \square = 5$ $\square =$ 8	$\square \div 8 = 4$ $\square =$ 32	$24 \div \square = 3$ $\square =$ 8	$35 \div 5 = \square$ $\square =$ 7

NAME_____ My Score:_____ Perfect Score A-C: 32

Use after textbook page 252.

Solving Problems

Solve each problem.

Work space

1. Sue bought 6 bags of cookies. Each bag weighed 3 pounds. How many pounds of cookies did she buy?

Arithmetic sentence: $6 \times 3 = \square$

Answer: She bought 18 pounds of cookies.

1.

2. Bill had 24 eggs. He put 6 eggs in each carton. How many cartons did he use?

Arithmetic sentence: $24 \div 6 = \square$

Answer: He used 4 cartons.

2.

3. Mrs. Johnson gave 3 paint brushes to each of the 7 children in the class. How many brushes did she give to the children?

Arithmetic sentence: $3 \times 7 = \square$

Answer: She gave them 21 paint brushes.

3.

4. If 24 boys march down the street in 4 rows of equal number, how many boys are in each row?

Arithmetic sentence: $24 \div 4 = \square$

Answer: There are 6 boys in each row.

4.

5. Mrs. Brown planted 7 tulip bulbs in each of 4 rows. How many tulips did she plant in all?

Arithmetic sentence: $7 \times 4 = \square$

Answer: She planted 28 tulips in all.

5.

6. A page in Joyce's stamp album has room for 6 rows of stamps with 4 stamps in each row. How many stamps does each page hold?

Arithmetic sentence: $6 \times 4 = \square$

Answer: Each page holds 24 stamps.

6.

NAME_____ My Score:_____ Perfect Score: 12

Checkup for Chapter 15

A Use one of the following words to complete each statement below.

divide	product	quotient	multiplier
dividend	multiply	divisor	multiplicand

1. In $8 \times 4 = 32$:

a. 32 is the product.

b. 4 is the multiplicand.

c. 8 is the multiplier.

2. In $45 \div 9 = 5$:

a. 5 is the quotient.

b. 45 is the dividend.

c. 9 is the divisor.

3. To find how many objects there are in 7 groups of 5 each, we would multiply 5 by 7.

4. If 21 objects are separated into 3 groups of equal size, and we wish to know how many objects are in each group, we divide 21 by 3.

B Find each product.

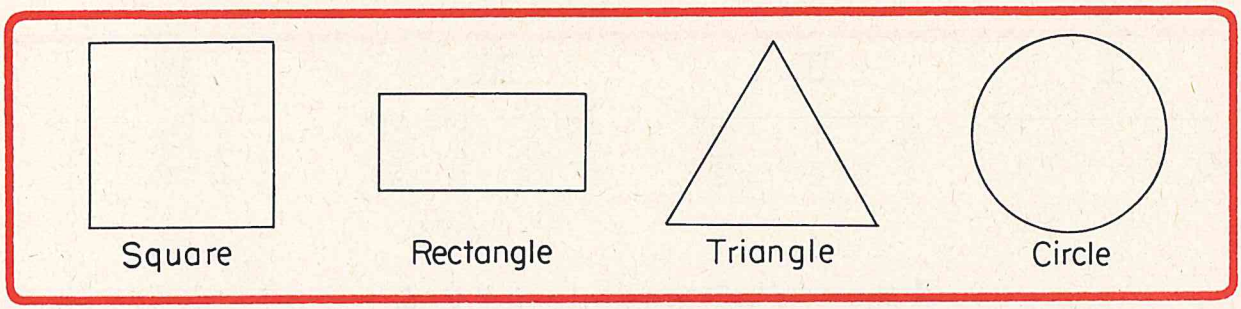
1.	2.	3.	4.	5.	6.
6	7	4	3	8	8
×4	×1	×9	×3	×4	×2
24	7	36	9	32	16

C Find the correct numeral for each □.

1.	2.	3.	4.
$14 \div 2 = \square$	$36 \div \square = 6$	$27 \div \square = 9$	$36 \div \square = 4$
$\square = 7$	$\square = 6$	$\square = 3$	$\square = 9$

NAME _____ My Score: _____ Perfect Score A-C: 18

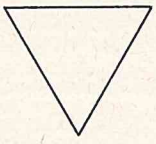
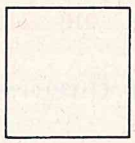
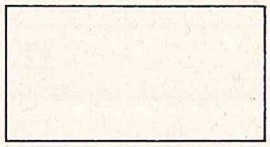
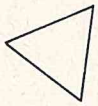
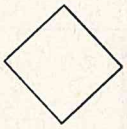
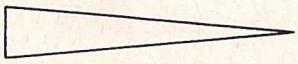
Circles, Squares, Rectangles, and Triangles



A Each of the descriptions below describe either a circle, a square, a rectangle, or a triangle. Write the name of the correct figure after each description.

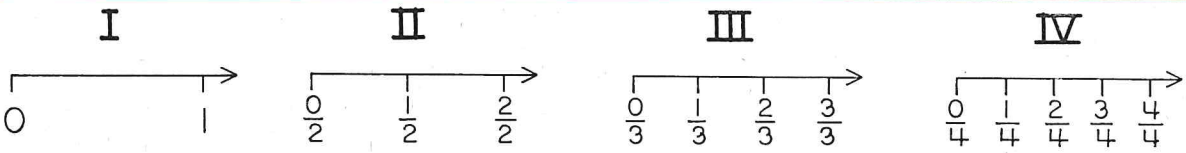
1. The shape of a wheel — Circle
2. Has only 3 sides — Triangle
3. Has all 4 sides equal in length — Square
4. Has 4 right angles; opposite sides equal in length — Rectangle
5. Has 4 right angles and all sides equal in length — Square

B Write the name of each figure below.

1. Circle
2.  Triangle
3.  Square
4. Rectangle
5.  Rectangle
6. Circle
7.  Triangle
8.  Square
9.  Triangle

NAME_____ My Score:_____ Perfect Score A-B: 13

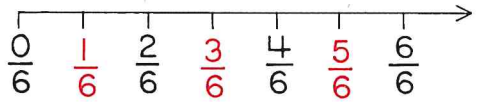
Using Fractions



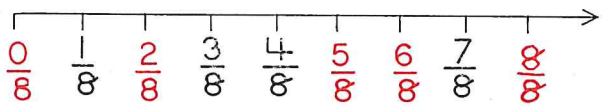
I shows a unit length from 0 to 1.
II shows the unit divided into halves.
III shows the unit divided into thirds.
IV shows the unit divided into fourths.

A Write the correct fractions under each mark on the number lines below.

1.



2.

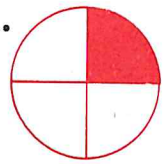


B Write the following as fractions.

1. one fifth $\frac{1}{5}$
2. three sixths $\frac{3}{6}$
3. five eighths $\frac{5}{8}$
4. seven tenths $\frac{7}{10}$
5. one third $\frac{1}{3}$
6. three fourths $\frac{3}{4}$
7. four tenths $\frac{4}{10}$
8. four fifths $\frac{4}{5}$
9. two sixths $\frac{2}{6}$
10. six eighths $\frac{6}{8}$
11. one fourth $\frac{1}{4}$
12. one tenth $\frac{1}{10}$

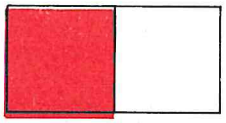
C Write the fraction that describes the shaded part of each figure below.

1.



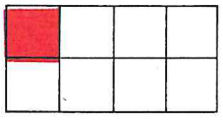
$\frac{1}{4}$

2.



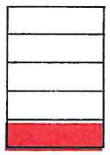
$\frac{1}{2}$

3.



$\frac{1}{8}$

4.

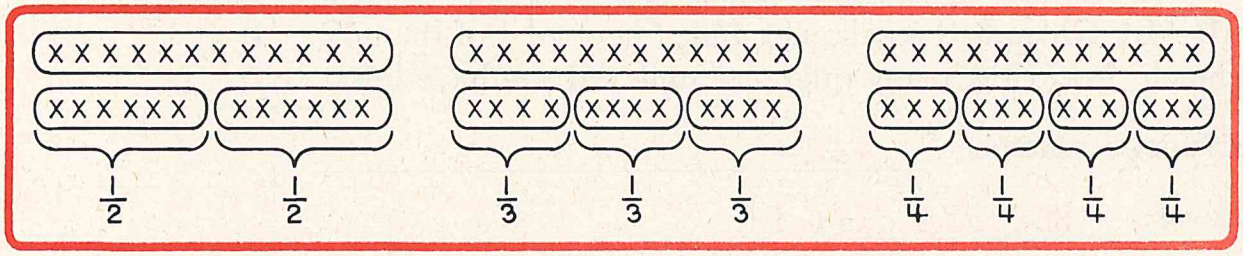


$\frac{1}{5}$

NAME_____ My Score:_____ Perfect Score A-C: 16

Use after textbook page 265.

Finding a Fractional Part of a Number



A Write the correct numeral in each ____.

1. $\frac{1}{2}$ of 12 = 6
2. $\frac{1}{3}$ of 12 = 4
3. $\frac{1}{4}$ of 12 = 3

B Write the correct numeral in each ____.

1. $\frac{1}{3}$ of 9 = 3
2. $\frac{1}{5}$ of 10 = 2
3. $\frac{1}{4}$ of 16 = 4
4. $\frac{1}{4}$ of 36 = 9
5. $\frac{1}{2}$ of 16 = 8
6. $\frac{1}{10}$ of 10 = 1
7. $\frac{1}{3}$ of 15 = 5
8. $\frac{1}{8}$ of 8 = 1
9. $\frac{1}{6}$ of 30 = 5
10. $\frac{1}{4}$ of 8 = 2
11. $\frac{1}{8}$ of 32 = 4
12. $\frac{1}{6}$ of 6 = 1
13. $\frac{1}{2}$ of 14 = 7
14. $\frac{1}{4}$ of 4 = 1
15. $\frac{1}{5}$ of 30 = 6
16. $\frac{1}{2}$ of 18 = 9

Can you do this? Write the correct numeral in each ____.

1. If $\frac{1}{3}$ of 12 = 4, $\frac{2}{3}$ of 12 = 8
2. If $\frac{1}{4}$ of 12 = 3, $\frac{2}{4}$ of 12 = 6.
3. If $\frac{1}{6}$ of 30 = 5, $\frac{5}{6}$ of 30 = 25.
4. If $\frac{1}{8}$ of 24 = 3, $\frac{3}{8}$ of 24 = 9.
5. If $\frac{1}{10}$ of 30 = 3, $\frac{3}{10}$ of 30 = 9.

NAME_____ My Score:_____ Perfect Score A-B: 18

Solving Problems

Solve each problem.

Work space

1. Mrs. Green had a gallon of milk. She used $\frac{1}{2}$ of the milk at lunch time. How many quarts of milk did she have left?

Arithmetic sentence: $4 \div 2 = \square$

Answer: She had 2 quarts left.

2. Tom's father had 30 feet of hose. He gave $\frac{1}{6}$ of the hose to a neighbor. How many feet of hose did the neighbor get?

Arithmetic sentence: $30 \div 6 = \square$

Answer: He got 5 feet of hose.

3. Mary had a dozen fish. She gave away $\frac{1}{4}$ of them. How many fish did she give away?

Arithmetic sentence: $12 \div 4 = \square$

Answer: She gave away 3 fish.

4. Dick's mother used $\frac{1}{4}$ pound of butter. How many ounces of butter did she use?

Arithmetic sentence: $16 \div 4 = \square$

Answer: She used 4 ounces of butter.

5. Willa's brother is 6 feet tall; her little sister is $\frac{1}{2}$ as tall as her brother. How tall is her little sister?

Arithmetic sentence: $6 \div 2 = \square$

Answer: Her sister is 3 feet tall.

6. There were 32 children in a class. On a very cold day $\frac{1}{8}$ of the children did not come to school. How many children stayed home?

Arithmetic sentence: $32 \div 8 = \square$

Answer: Four children stayed home.

NAME_____ My Score:_____ Perfect Score: 12

Division with a Remainder Other Than Zero

♦ Every division has a remainder.

Remainder of 0	Remainder of 1	Remainder of 2
$3\overline{)6}$ → 2	$3\overline{)7}$ → 2 r1	$3\overline{)8}$ → 2 r2
because $2\times3=6$.	because $2\times3=6$ and $6+1=7$.	because $2\times3=6$ and $6+2=8$.

A Write the correct word or numeral in each _____.

1. $6\div3=2$ has a remainder of 0 because $2\times3=$ 6 .
2. $7\div3=2$ r1 because $2\times3=$ 6 and $6+1=7$.
3. $8\div3=2$ r2 because $2\times3=6$ and $6+2=$ 8 .
4. To check a division, multiply the quotient by the divisor, then add the remainder. .

B Find each quotient and remainder.

	a	*b*	*c*	*d*
1.	$3\overline{)25}$ → 8 r1 −24 1	$2\overline{)9}$ → 4 r1	$3\overline{)19}$ → 6 r1	$2\overline{)15}$ → 7 r1
2.	$3\overline{)17}$ → 5 r2 −15 2	$3\overline{)23}$ → 7 r2	$3\overline{)14}$ → 4 r2	$3\overline{)11}$ → 3 r2

NAME_____ My Score:_____ Perfect Score A-B: 10

Use after textbook page 272.

Problem Solving

Solve each problem.

Work space

1. Eunice has 16 pounds of onions in one large bag. She plans to put the onions into smaller bags that hold 3 pounds each. How many bags can she fill, and how many pounds of onions will be left over?

Arithmetic sentence: $16 \div 3 = \square$

Answer: She can fill 5 bags with 1 lb. remaining.

1.

2. Bernard delivered $\frac{1}{6}$ of the 30 newspapers on his paper route in 5 minutes. How many papers did he deliver in that time?

Arithmetic sentence: $30 \div 6 = \square$

Answer: He delivered 5 papers in that time.

2.

3. Mildred drew a picture of a rectangle. Two sides of the rectangle were 20 inches long; the other two sides were $\frac{1}{5}$ as long. How long was each of the short sides of the rectangle?

Arithmetic sentence: $20 \div 5 = \square$

Answer: Each short side was 4 inches long.

3.

4. There were 32 boys in the class and $\frac{1}{8}$ of them were wearing sweaters. How many were wearing sweaters?

Arithmetic sentence: $32 \div 8 = \square$

Answer: Four boys were wearing sweaters.

4.

5. June's mother put 7 cookies on a plate to serve to 3 of June's girl friends. If each girl ate the same number of cookies, how many would each girl eat, and how many cookies would remain?

Arithmetic sentence: $7 \div 3 = \square$

Answer: Each girl would eat 2 cookies and 1 would remain.

5.

NAME_____ My Score:_____ Perfect Score: 10

Checkup for Chapter 16

A Underline each correct word in parentheses.

1. $\frac{1}{5}$ of a line is (longer, shorter) than $\frac{1}{10}$ of the same line.
2. A rectangle has (three, four) sides.
3. A line drawn from one corner to the opposite corner of a square makes a picture of 2 (rectangles, triangles).
4. A square has (two, four) right angles.
5. A triangle has (two, three) sides.

B Find the correct numeral for each □. Write the arithmetic sentence.

	a	*b*	*c*	*d*
1.	$\frac{1}{5}$ of 15 = □	$\frac{1}{8}$ of 24 = □	$\frac{1}{6}$ of 12 = □	$\frac{1}{5}$ of 10 = □
	15 ÷ 5 = □	24 ÷ 8 = □	12 ÷ 6 = □	10 ÷ 5 = □
	□ = 3	□ = 3	□ = 2	□ = 2

C Find the correct numeral for each blank below.

1. $\frac{1}{2}$ lb. = 8 oz.
2. $\frac{1}{3}$ yd. = 12 in.
3. $\frac{1}{2}$ gal. = 2 qt.
4. $\frac{1}{6}$ ft. = 2 in.

D Find each quotient and remainder.

	a	*b*	*c*	*d*
1.	$3\overline{)28}$ → 9 r1	$2\overline{)13}$ → 6 r1	$3\overline{)29}$ → 9 r2	$3\overline{)13}$ → 4 r1
2.	$3\overline{)17}$ → 5 r2	$3\overline{)22}$ → 7 r1	$3\overline{)5}$ → 1 r2	$3\overline{)20}$ → 6 r2

NAME_____ My Score:_____ Perfect Score A-D: 25

Multiplying and Dividing by 7, 8, and 9

$7\times7=49$	$8\times8=64$	$9\times7=63$	$9\times8=72$	$9\times9=81$
$49\div7=7$	$64\div8=8$	$63\div7=9$	$72\div8=9$	$81\div9=9$

- If you know a multiplication fact, it helps you learn a division fact.
- If you know a division fact, it helps you learn a multiplication fact.

A Write the correct numeral in each _____.

1. Since $9\times7=63$, then $63\div7=$ 9 .
2. Since $9\times8=72$, then $72\div8=$ 9 .
3. Since $8\times8=64$, then $64\div8=$ 8 .
4. Since $9\times9=81$, then $81\div9=$ 9 .

B Find the correct numeral for each □.

	a	*b*	*c*	*d*
1.	$81\div9=\square$ $\square=$ 9	$9\times9=\square$ $\square=$ 81	$9\times7=\square$ $\square=$ 63	$\square\div7=9$ $\square=$ 63
2.	$49\div\square=7$ $\square=$ 7	$7\times\square=49$ $\square=$ 7	$8\times\square=48$ $\square=$ 6	$48\div6=\square$ $\square=$ 8
3.	$8\times9=\square$ $\square=$ 72	$72\div8=\square$ $\square=$ 9	$8\times8=\square$ $\square=$ 64	$64\div8=\square$ $\square=$ 8

Can you do this? The following multiplications are related to those in the lesson above. See if you can do them.

	a	*b*	*c*	*d*
1.	900 $\times$ 6 5400	600 $\times$ 8 4800	800 $\times$ 8 6400	800 $\times$ 6 4800
2.	800 $\times$ 7 5600	700 $\times$ 7 4900	900 $\times$ 9 8100	700 $\times$ 9 6300

NAME_____ My Score:_____ Perfect Score A-B: 14

Multiplying Tens by Ones

$3 \times 23 = \square$
$3 \times (20+3) = \square$
$(3 \times 20) + (3 \times 3) = \square$
$60 + 9 = \square$
$69 = \square$

T	O	
2	3	
×	3	
	9	3 ones × 3 ones
6	0	3 ones × 2 tens
6	9	60+9

A Write the correct numeral in each _____.

1. $3 \times 23 = 3 \times (20 + \underline{3})$.
2. $3 \times (20+3) = (3 \times 20) + (3 \times \underline{3})$.
3. (2 tens + 3 ones) × 3 ones = 6 tens + <u>9</u> ones.

B Find each product. Show partial products in rows 2 and 3.

	a	*b*	*c*	*d*	*e*
1.	40	30	10	20	10
	×2	×3	×9	×4	×3
	80	90	90	80	30
2.	42	31	11	21	13
	×2	×3	×7	×4	×3
	4	3	7	4	9
	80	90	70	80	30
	84	93	77	84	39
3.	33	14	22	11	23
	×2	×2	×3	×9	×2
	6	8	6	9	6
	60	20	60	90	40
	66	28	66	99	46

NAME_____ My Score:_____ Perfect Score A-B: 16

Changing the Form of Ones to Tens

$\overset{1}{14}$	14	
14	×3	
14	12	____ 3 ones × 4 ones
+14	30	____ 3 ones × 1 ten
42	42	____ 12+30

A Write the correct numeral in each ____.

1. In the example above, there are 2 partial products.
2. The product of 3 ones and 4 ones is 12.

B Find each product, showing the partial products.

	a	*b*	*c*	*d*
1.	25 ×3 15 60 75	24 ×3 12 60 72	15 ×4 20 40 60	47 ×2 14 80 94
2.	14 ×5 20 50 70	36 ×2 12 60 72	17 ×4 28 40 68	16 ×4 24 40 64
3.	19 ×4 36 40 76	35 ×2 10 60 70	23 ×4 12 80 92	49 ×2 18 80 98

NAME_____ My Score:_____ Perfect Score A-B: 13

Changing the Form of Tens to Hundreds

I

H	T	O
	6	1
	6	1
+	6	1
1	8	3

II

H	T	O	
	6	1	
	×	3	
		3	3 ones × 1 one = 3 ones
1	8	0	3 ones × 6 tens = 18 tens
1	8	3	3+180

A Write the correct word or numeral in each _____.

1. To find the sum of 3 sixty-ones in **I**, first we add the ones, then we add the tens.
2. To find the product of 3 and 61, first we multiply the ones by 3, then the tens by 3.
3. The product of 3 and 60 is 18 tens or 1 hundred + 8 tens.

B Find each product; show the partial products.

	a	*b*	*c*	*d*	*e*
1.	41	94	61	32	61
	×8	×2	×7	×4	×2
	8	8	7	8	2
	320	180	420	120	120
	328	188	427	128	122
2.	73	81	54	63	91
	×3	×6	×2	×3	×2
	9	6	8	9	2
	210	480	100	180	180
	219	486	108	189	182

NAME_____ My Score:_____ Perfect Score A-B: 13

Multiplying Hundreds by Ones

$8 \times 1 = 8$ _____	$8 \times 10 = 80$ _____	$8 \times 100 = 800$
$9 \times 1 = 9$ _____	$9 \times 10 = 90$ _____	$9 \times 100 = 900$

A Write the correct numeral in each _____.

1. Since $4 \times 1 = 4$ and $4 \times 10 = 40$, then $4 \times 100 =$ 400 .
2. Since $2 \times 1 = 2$ and $2 \times 10 = 20$, then $2 \times 100 =$ 200 .

B Find each product.

	a	*b*	*c*
1.	$1 \times 300 = \square$ $\square =$ 300	$4 \times 200 = \square$ $\square =$ 800	$3 \times 300 = \square$ $\square =$ 900
2.	$2 \times 400 = \square$ $\square =$ 800	$7 \times 100 = \square$ $\square =$ 700	$1 \times 500 = \square$ $\square =$ 500
3.	$5 \times 100 = \square$ $\square =$ 500	$2 \times 300 = \square$ $\square =$ 600	$6 \times 100 = \square$ $\square =$ 600

Can you do this? Find each product or quotient.

	a	*b*	*c*
1.	$\square \times 400 = 800$ $\square =$ 2	$3 \times \square = 600$ $\square =$ 200	$\square \times 300 = 900$ $\square =$ 3
2.	$6000 \times 1 = \square$ $\square =$ 6000	$4 \times 2000 = \square$ $\square =$ 8000	$3 \times \square = 9000$ $\square =$ 3000
3.	$1600 \div 4 = \square$ $\square =$ 400	$8000 \div \square = 4000$ $\square =$ 2	$4000 \div \square = 500$ $\square =$ 8
4.	$22222 \times 2 = \square$ $\square =$ 44444	$23232 \times 2 = \square$ $\square =$ 46464	$33333 \times 3 = \square$ $\square =$ 99999

NAME _____ My Score: _____ Perfect Score A-B: 10

Multiplying Three-Digit Numbers

H	T	O	
4	2	1	
	×	2	
		2	2 ones × 1 one = 2 ones
	4	0	2 ones × 2 tens = 4 tens
8	0	0	2 ones × 4 hundreds = 8 hundreds
8	4	2	2 + 40 + 800

A Write the correct numeral in each ____.

1. The partial product of ones times ones is 2 ones.
2. The partial product of ones times tens is 4 tens.
3. The partial product of ones times hundreds is 8 hundreds.

B Find each product.

	a	*b*	*c*	*d*	*e*
1.	321 ×3 3 60 900 963	402 ×2 804	433 ×2 866	213 ×3 639	421 ×2 842
2.	124 ×2 248	233 ×3 699	121 ×4 484	222 ×3 666	321 ×3 963

NAME_____ My Score:_____ Perfect Score A-B: 12

Problem Solving

Solve the following problems.

Work space

1. Joan has 132 stamps. Her brother has three times as many stamps. How many stamps does her brother have?

Arithmetic sentence: $132 \times 3 = \square$

Answer: Her brother has 396 stamps.

1.

2. The milkman delivers 3 quarts of milk each day to the Smith's home. How many quarts does he deliver in 4 weeks?

Arithmetic sentence: $3 \times (4 \times 7) = \square$ or $3 \times 28 = \square$

Answer: He delivers 84 quarts of milk.

2.

3. Mrs. Winfield has 17 roses and 4 vases. If she divides the flowers equally among the vases, how many roses will she have in each vase? How many roses will she have remaining?

Arithmetic sentence: $17 \div 4 = \square$

Answer: Each vase will have 4 roses; 1 rose remaining.

3.

4. The gas station sold 1,047 gallons of gasoline during the week and 2,019 gallons over the weekend. How many more gallons were sold over the weekend than were sold during the week?

Arithmetic sentence: $2019 - 1047 = \square$

Answer: 972 gallons more were sold over the weekend.

4.

5. During the summer, John's older sister earned $50.00 as a camp counselor. Then she worked as a baby sitter and made $32.50. How much money did she earn in all?

Arithmetic sentence: $5000 + 3250 = \square$

Answer: She earned $82.50 in all.

5.

NAME_____ My Score:_____ Perfect Score: 10

Dividing a Two-Digit Number

$$\begin{array}{r} 20 \\ 4\overline{)80} \\ -80 \\ \hline 0 \end{array}$$

There are 20 fours in 80.

$80 \div 4 = 20$

Check: $4 \times 20 = 80$

Zero remainder

A Write the correct numeral in each _____.

1. Since $20 \times 4 = 80$, then $80 \div 4 =$ 20 .
2. There are 20 fours in 80 because there are 2 fours in 8 .

B Find each quotient.

	a	*b*	*c*	*d*
1.	$2\overline{)20}$	$5\overline{)50}$	$2\overline{)80}$	$3\overline{)30}$
2.	$3\overline{)90}$	$4\overline{)40}$	$2\overline{)40}$	$2\overline{)60}$
3.	$3\overline{)60}$	$4\overline{)80}$	$1\overline{)10}$	$6\overline{)60}$

NAME_____ My Score:_____ Perfect Score A-B: 13

Dividing Tens and Ones

$42 \div 2 = (40+2) \div 2$
$= (40 \div 2) + (2 \div 2)$
$= 20 + 1$.
$= 21$

$2\overline{)42}$ or $2\overline{)40+2}$ $\quad 20+1$ or 21

A Write the correct numeral in each _____.

1. 40+ 2 is another name for 42.

2. The quotient 21 is the sum of $(40 \div 2)$ and $(2 \div$ 2 $)$.

B Find each quotient.

	a	*b*	*c*	*d*
1.	$3\overline{)66}$ -60 06 -6 0	$2\overline{)46}$	$2\overline{)22}$	$3\overline{)33}$
2.	$2\overline{)24}$	$3\overline{)99}$	$2\overline{)82}$	$2\overline{)62}$

NAME_____ My Score:_____ Perfect Score A-B: 9

Use after textbook page 293.

Using a Grid in Division

Think: 85 = 8 tens + 5 ones
8 ÷ 4 = 2; check: 2 × 4 = 8
Subtract; 0 tens + 5 ones = 5
5 ÷ 4 = 1 r1; check: 1 × 4 = 4
Subtract; the remainder is 1

	T	O
	2	1 r1
4)	8	5
	−8	
	0	5
	−	4
		1

A Write the correct numeral in each ____.

1. The difference of the tens is 0 .
2. The remainder of the division is 1 .

B Find each quotient.

	a	*b*	*c*	*d*
1.	22 r1 2)45 −4 05 −4 1	1 1 r1 8)8 9	2 0 r3 4)8 3	1 1 r3 6)6 9
2.	3 2 r2 3)9 8	1 4 r1 2)2 9	2 2 r2 3)6 8	3 1 r2 3)9 5

NAME_____ My Score:_____ Perfect Score A-B: 9

Division With a Remainder of Tens

Think: 51 = 5 tens + 1 one
5÷3=1 r2; check: 1×3=3
Subtract; 2 tens + 1 one = 21
21÷3=7; check: 7×3=21
Subtract; the remainder is 0

```
   T | O
     1 | 7
   ----
3 ) 5 | 1
  -3 |
  ---
   2 | 1
  -2 | 1
  ---
     | 0
```

A Write the correct numeral in each ____.

1. The remainder of the division is 0.
2. Since 17×3=51, then 51÷3= 17.

B Find each quotient.

	a	*b*	*c*	*d*
1.	14 R 0	26	15	15
2.	12	13	19	18

NAME_____ My Score:_____ Perfect Score A-B: 9

Dividing Hundreds

$$426 \div 2 = (400+20+6) \div 2$$
$$= (400 \div 2) + (20 \div 2) + (6 \div 2) = 200+10+3 = 213$$

A Study the example above and then write the correct numeral in each _____ to complete the division $624 \div 2 = \square$.

1. $624 = 600 + \underline{20} + 4$.
2. $(624 \div 2) = (600 \div 2) + (20 \div \underline{2}) + (4 \div 2) = 312$.

B Find each quotient.

	a	*b*	*c*	*d*
1.	$4\overline{)408}$ → 102	$3\overline{)639}$ → 213	$4\overline{)808}$ → 202	$2\overline{)624}$ → 312
2.	$3\overline{)937}$ → 312 r1	$3\overline{)607}$ → 202 r1	$2\overline{)643}$ → 321 r1	$3\overline{)907}$ → 302 r1

NAME_____ My Score:_____ Perfect Score A-B: 8

Use after textbook page 297.

Review and Practice

Find each sum, difference, product, or quotient.

	a	*b*	*c*	*d*	*e*
1.	$7\overline{)73}$ → 10 r3	$3\overline{)669}$ → 223	$4\overline{)804}$ → 201	$4\overline{)73}$ → 18 r1	$4\overline{)69}$ → 17 r1
2.	$8 \times 3 = 24$	$7 \times 9 = 63$	$8 \times 8 = 64$	$16 \times 9 = 144$	$15 \times 7 = 105$
3.	$384 \times 2 = 768$	$211 \times 4 = 844$	$454 \times 3 = 1362$	$118 \times 7 = 826$	$283 \times 2 = 566$
4.	$627 + 813 + 201 = 1641$	$618 + 207 + 33 = 858$	$441 + 106 + 883 = 1430$	$1786 + 1167 + 175 = 3128$	$6017 + 213 + 29 = 6259$
5.	$9207 - 1324 = 7883$	$5000 - 2999 = 2001$	$7839 - 783 = 7056$	$2116 - 99 = 2017$	$3738 - 378 = 3360$

NAME_____ My Score:_____ Perfect Score: 25

Solving Problems

Solve each problem.

Work space

1. Bob wanted to buy some 5¢ stamps with $5.05. How many stamps could he buy?

Arithmetic sentence: 505 ÷ 5 = □

Answer: He could buy 101 stamps.

2. Mr. White sold 7 bags of grass seed. If each bag contained 50 pounds of seed, how many pounds of seed did he sell in all?

Arithmetic sentence: 7 × 50 = □

Answer: He sold 350 pounds in all.

3. A package of ribbon contains 600 feet of ribbon. How many yards is that?

Arithmetic sentence: 600 ÷ 3 = □

Answer: 600 feet is 200 yards.

4. Howard paid 96¢ for 2 pounds of candy. How much does one pound of candy cost?

Arithmetic sentence: 96 ÷ 2 = □

Answer: One pound of candy costs 48¢.

5. LaVerne has 99 books. She wants to put the same number of books on each of 9 shelves. How many books will she put on each shelf?

Arithmetic sentence: 99 ÷ 9 = □

Answer: She will put 11 books on each shelf.

6. Al gains 2 pounds a month. How many pounds will he gain in 18 months?

Arithmetic sentence: 2 × 18 = □

Answer: He will gain 36 pounds.

NAME _____ My Score: _____ Perfect Score: 12

Checkup for Chapter 17

A Write the correct numeral in each ____.

1. Since $2 \div 2 = 1$, then $20 \div$ 2 $= 10$.
2. Since $4 \div 4 = 1$, then $400 \div 4 =$ 100 .
3. $84 \div 4 = (80 \div 4) + ($ 4 $\div 4)$.
4. $72 \div 9 = 8$ because $9 \times 8 =$ 72 .
5. In 83×3 the partial products are 9 and 240 .
6. $10+10+10+10=$ 4 $\times 10$.

B Find each product.

1.	2.	3.	4.	5.
422	273	315	114	149
$\times 2$	$\times 3$	$\times 2$	$\times 5$	$\times 6$
844	819	630	570	894

C Find each quotient.

1.	2.	3.	4.	5.
16	17 r2	8 r1	402	313
$4\overline{)64}$	$5\overline{)87}$	$8\overline{)65}$	$2\overline{)804}$	$3\overline{)939}$

NAME_____ My Score:_____ Perfect Score A-C: 16

23456789 3210987765

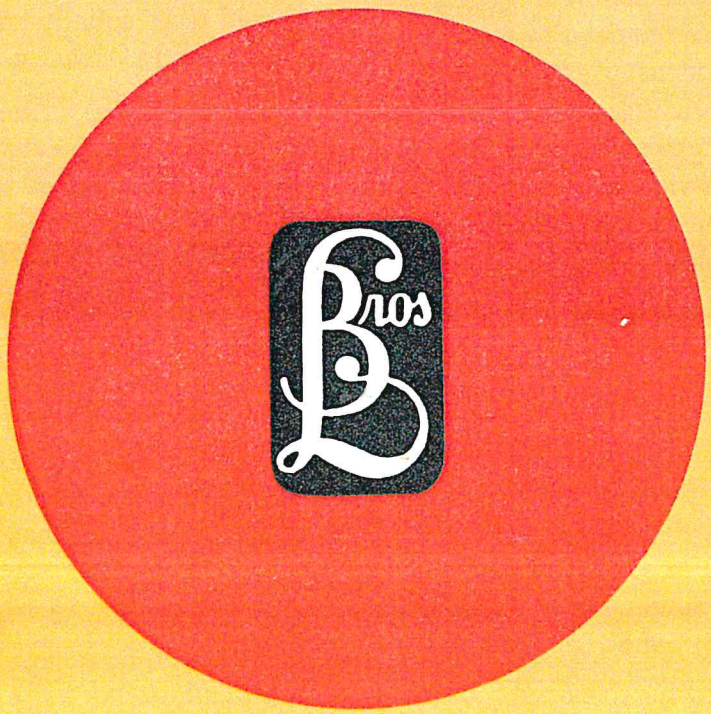
mathematical principle presented in an illustrated, clear, and understandable manner. The inclusion of this learning material affords the pupil an opportunity to visualize and to think again about the mathematics presented in the correlated lesson in his text. The learning material is followed by section A in which the pupil is required to show that he understands the ideas presented in the display and can apply these ideas to computation. The illustrative material and the practice material provide a means for the pupil to develop deeper understandings of mathematical principles.

Computation The remaining sections on pages devoted to computational practice provide opportunities for the pupil to put mathematical principles to use as he performs computations. Sufficient space is provided for the pupils to perform each computation. Where applicable, the practice exercises are grouped to enable the pupil to progress from very simple to increasingly complex computations and to enable the teacher to make immediate diagnosis of the pupil's need for further instruction. In some rows of practice material the complete computation of the first exercise is shown. The pupil may use this exercise as a model. He is thus given an opportunity to help himself if he needs help.

Individual differences Throughout this practice book pupils will find themselves faced with a challenge in the section of the page labeled *Can you do this?* All pupils are expected to try to meet the challenge and thus extend their understandings of mathematical abilities. However, not all pupils can be expected to be equally successful in completing the exercises in this section.

Problem solving Story problems in arithmetic can be translated into equations which can then be solved by using the operations of arithmetic. All pupils will profit from making the translation prior to an attempt to find an answer to a problem. Pupils using this practice book are given help and practice in making suitable translations and in proceeding to a solution. Space is provided for the pupil to write an equation for each problem as well as for writing the answer for each problem. Space is also provided in which the pupil may do the computation necessary for the solution of the equation.

Diagnostic checkup The checkup pages of this practice book provide an opportunity for pupil and teacher alike to measure the pupil's understandings of mathematical principles and to measure the pupil's ability to apply his skills. These pages also help both the teacher and the pupil to determine specific points of weakness of individual pupils so that specific individual help can be provided.



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